PMO-RALG

KARAGWE DC CWIQ
Survey on Poverty, Welfare and Services In Karagwe DC

SEPTEMBER 2006

Implemented by:
EDI (Economic Development Initiatives)
PO Box 393, Bukoba
Tanzania

Telephone and Fax: +255-(0)28-2220059
Email:
research@edi-africa.com
www.edi-africa.com

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ACKNOWLEDGEMENTS

DEFINITIONS

General

Accessible Village | Within a district, accessible villages are villages located closer to the district capital, all-weather roads, and public transport.

Remote Village | Within a district, remote villages are villages located farther from the district capital, all-weather roads, and public transport.

Socio-economic Group | The socio-economic group of the household is determined by the type of work of the main income earner.

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

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

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.
Vaccinations	BCG: Anti-tuberculosis DPT: Diphtheria, Pertussis3, Tetanus OPV: Oral Polio Vaccination
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.
Orphan	A child is considered an orphan when he/she has lost at least one parent and is under 18 years.
Foster child	A child is considered foster if neither his/her parents reside in the household

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 but had been actively looking for it.

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).

Household duties   Household tasks (cleaning, cooking, fetching firewood, water, etc.) that do not entail payment

Household worker   A household worker performs household duties but received payment.

Household as employer   A person is said to be employed by his/her household if he/she does domestic/household work for the household they live in (e.g. a housewife or a child that works on his/her parents' fields or shop). It does not include people whose main job was domestic work for other households (private sector).

Welfare

Access to Facilities   A household is considered to have access to facilities if it is located within 30 minutes of travel from the respective facilities.

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Generic Core Welfare Indicators (2006)

	Total	Margin of error	Accessible	Remote	Poor	Non-poor
Household characteristics						
Dependency ratio	1.2	0.1	1.2	1.2	1.5	1.1
Head is male	80.6	1.8	81.3	79.9	79.1	81.0
Head is female	19.4	1.9	18.7	20.1	20.9	19.0
Head is monagamous	55.2	2.2	56.1	54.2	53.1	55.7
Head is polygamous	11.8	1.5	13.3	10.3	10.9	12.0
Head is not married	33.0	3.0	30.6	35.5	36.0	32.3
Household welfare						
Household economic situation compared to one year ago						
Worse now	44.1	2.9	39.5	48.7	47.3	43.3
Better now	32.6	3.3	34.1	31.0	24.0	34.8
Neighborhood crime/security situation compared to one year ago						
Worse now	24.7	2.8	23.0	26.3	25.7	24.4
Better now	31.0	2.2	31.0	31.1	31.3	31.0
Difficulty satisfying household needs						
Food	45.2	3.2	39.3	51.0	57.0	42.1
School fees	3.2	0.8	3.3	3.1	6.5	2.4
House rent	0.5	0.3	1.0	0.0	0.0	0.6
Utility bills	0.0	0.0	0.0	0.0	0.0	0.0
Health care	25.1	2.5	19.5	30.7	39.9	21.3
Agriculture						
Land owned compared to one year ago						
Less now	3.3	0.8	1.9	4.6	2.4	3.5
More now	6.9	1.1	4.7	9.1	6.3	7.1
Cattle owned compared to one year ago						
Less now	5.9	1.1	4.4	7.4	7.1	5.6
More now	5.2	1.3	4.6	5.9	0.5	6.4
Use of agricultural inputs						
Yes	29.8	3.1	31.1	28.5	28.5	30.1
Fertilizers	96.6	1.6	95.3	98.0	96.2	96.7
Improved seedlings	3.9	2.0	5.6	2.0	3.8	3.9
Fingerlings	1.0	1.0	0.0	2.0	5.0	0.0
Hooks and nets	0.0	0.0	0.0	0.0	0.0	0.0
Insecticides	0.8	0.8	1.5	0.0	0.0	0.9
Other	0.9	0.9	1.8	0.0	0.0	1.1
Household infrastructure						
Secure housing tenure	3.8	1.6	3.5	4.1	3.8	3.8
Access to water	71.3	4.8	75.2	67.5	63.3	73.3
Safe water source	23.1	5.9	22.5	23.6	26.8	22.1
Safe sanitation	0.5	0.4	1.1	0.0	0.0	0.7
Improved waste disposal	8.2	2.1	8.8	7.6	6.2	8.7
Non-wood fuel used for cooking	0.0	0.0	0.0	0.0	0.0	0.0
Ownership of IT/Telecommunications Equipment						
Fixed line phone	0.0	0.0	0.0	0.0	0.0	0.0
Mobile phone	7.9	1.6	12.7	3.1	0.0	10.0
Radio set	53.6	2.3	58.4	48.9	21.4	62.0
Television set	0.4	0.3	0.8	0.0	0.0	0.5

Employment						
Employer in the main job						
Civil service	1.1	0.4	1.8	0.3	0.0	1.4
Other public serve	0.4	0.2	0.4	0.3	0.0	0.5
Parastatal	0.0	0.0	0.0	0.0	0.0	0.0
NGO	0.1	0.1	0.2	0.0	0.0	0.2
Private sector formal	0.5	0.3	1.0	0.1	0.0	0.7
Private sector informal	47.5	1.5	47.1	48.0	47.2	47.6
Household	48.0	1.6	47.4	48.6	50.2	47.4
Activity in the main job						
Agriculture	78.9	2.1	74.3	83.5	87.1	76.6
Mining/quarrying	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	0.0	0.0	0.0	0.0
Services	1.0	0.6	1.9	0.0	0.0	1.2
Employment Status in last 7 days						
Unemployed (age 15-24)	0.4	0.4	0.8	0.0	1.8	0.0
Male	0.9	0.9	1.8	0.0	4.7	0.0
Female	0.0	0.0	0.0	0.0	0.0	0.0
Unemployed (age 15 and above))	0.3	0.2	0.4	0.3	0.5	0.3
Male	0.6	0.4	0.5	0.6	1.3	0.4
Female	0.2	0.2	0.3	0.0	0.0	0.2
Underemployed (age 15 and above)	28.9	2.4	32.4	25.4	25.8	29.8
Male	39.6	3.2	43.7	35.5	33.2	41.2
Female	19.4	2.9	22.1	16.7	20.4	19.0
Education						
Adult literacy rate						
Total	66.8	2.5	74.4	59.2	53.6	70.6
Male	75.2	2.7	83.0	67.2	57.6	79.5
Female	59.5	3.3	66.8	52.3	50.8	62.3
Youth literacy rate (age 15-24)						
Total	77.2	3.8	88.6	66.4	65.5	80.3
Male	79.0	4.1	89.9	68.5	66.9	81.6
Female	75.7	4.9	87.5	64.7	64.5	79.1
Primary school						
Access to School	51.8	6.1	69.5	34.5	45.9	54.5
Primary Gross Enrollment	109.6	3.9	112.0	107.3	94.3	116.5
Male	110.1	5.1	116.7	103.3	99.9	115.2
Female	109.1	5.3	106.5	111.5	87.2	117.9
Primary Net Enrollment	79.2	2.5	82.9	75.6	73.8	81.7
Male	79.7	2.9	81.9	77.4	77.0	81.0
Female	78.7	3.7	84.0	73.7	69.7	82.3
Satisfaction	46.5	3.2	51.8	41.2	43.5	47.6
Primary completion rate	7.1	1.6	9.2	5.2	4.4	8.4

	2003	2006	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Net Enrolment Rate							
Primary School	75.3	79.2	3.9	3.4		-2.8	10.6
Secondary School	15.7	11.8	-3.9	2.6	***	4.7	15.2
Rate of Dissatisfaction with School	39.0	51.2	12.2	5.8	**	1.1	24.4
Reasons for Dissatisfaction							
Books/Supplies	52.4	20.0	-32.4	9.5	***	-52.3	-14.4
Poor Teaching	7.0	11.4	4.4	4.5		-4.7	13.4
Lack of Teachers	74.3	48.2	-26.1	7.3	***	-42.0	-12.9
ıd Condition of Facilities	54.9	48.7	-6.2	9.6		-12.2	26.2
Overcrowding	19.0	28.9	9.9	7.2		-4.5	24.3
Health Facility Consulted							
Private hospital	3.5	3.7	0.2	1.7		-3.2	3.7
Government hospital	58.7	51.9	-6.8	6.2		-19.4	5.5
Traditional healer	4.4	3.8	-0.6	1.8		-4.2	3.1
Pharmacy	10.2	32.8	22.6	3.4	***	15.7	29.2
Rate of Dissatisfaction with Health Facilities	24.3	32.3	8.0	5.3		-2.3	18.9
Reasons for Dissatisfaction							
Long wait	32.3	45.6	13.3	10.5		-10.2	31.9
of trained professionals	21.0	15.3	-5.7	6.4		-20.9	4.8
Cost	27.0	46.6	19.6	10.8	*	-2.2	41.2
No drugs available	38.1	6.6	-31.5	7.3	***	-46.2	-16.9
Unsuccessful treatment	40.7	3.8	-36.9	13.1	***	-64.7	-12.0
Child Delivery							
Hospital or Maternity W	28.7	28.8	0.1	5.9		-11.3	12.2
Delivery Assistance							
Doctor/Nurse/Midwife	28.4	29.0	0.6	6.3		-12.8	12.2
TBA	65.1	43.3	-21.8	5.5	***	-32.0	-9.9
Self-assistance	6.5	27.3	20.8	4.4	***	12.0	29.5
Child Nutrition							
Stunted	49.5	38.0	-11.5	4.2	***	-22.1	-5.4
Severely Stunted	21.3	15.4	-5.9	3.3	*	-12.9	0.4
Wasted	6.0	4.0	-2.0	1.7	**	-6.7	0.0
Severely Wasted	2.3	0.7	-1.7	0.8	**	-3.2	-0.1

1 INTRODUCTION

1.1 The Karagwe District CWIQ

This report presents district level analysis of data collected in the Karagwe District Core Welfare Indicators Survey using the Core Welfare Indicators Questionnaire instrument (CWIQ).

The survey was commissioned by the Prime Minister's Office – Regional Administration and Local Governance and implemented by EDI (Economic Development Initiatives), a Tanzanian research and consultancy company. The report is aimed at national, regional and district level policy makers, as well as the research and policy community at large.

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. An extra section on governance and satisfaction with people in public office was added specifically for this survey.

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.

Karagwe District CWIQ was the second of its kind to be administered in Karagwe District, the first one having been administered in 2003. Chapter 9 of this report analyses changes between the two surveys.

Although beyond the purpose of this report, the results of Karagwe CWIQ could also be set against those of other CWIQ surveys that have are being implemented at the time of writing in other districts in Tanzania: Bariadi DC, Bukoba DC, Bukombe DC, Bunda DC, Dodoma DC, Dodoma MC, Hanang DC, Kasulu DC, Kibondo DC, Kigoma DC, Kilosa DC, Kishapu DC, Kongwa DC, Kyela DC, Ludewa DC, Makete DC, Maswa DC, Meatu DC, Kahama DC, Mbulu DC, Morogoro DC, Mpwapwa DC, Muheza DC, Musoma DC, Ngara DC, Ngorongoro DC, Njombe DC, Rufiji DC, Shinyanga MC, Singida DC, Songea DC, Sumbawanga DC, Tanga MC, Temeke MC. Other African countries that have implemented nationally representative CWIQ surveys include Malawi, Ghana and Nigeria.

1.2 Sampling

The Karagwe District CWIQ was sampled to be representative at district level. Data from the 2002 Census was used to put together a list of all villages in the district. In the first stage of the sampling process villages were chosen proportional to their population size. In a second stage the sub-village (kitongoji) was chosen within the village through simple random sampling. In the selected sub-village (also referred to as cluster or enumeration area in this report), all households were listed and 15 households were randomly selected. In total 450 households in 30 clusters were visited. All households were given statistical weights reflecting the number of households that they represent.

A 10-page interview was conducted in each of the sampled households by an experienced interviewer trained by EDI.

Table 1.1 Variables Used to Predict Consumption Expenditure

Basic Variables	*Household Assets*
Age of household head	Wall material
Household size	Floor material
Education of household head	Radio, radio cassette, music system
	Iron, electric or charcoal
Food Security	Total land
Number of days the household had meat	
Number of meals per day	*Village level variables*
	Proportion of households with access to a safe source of drinking water
Household Amenities	
People per bedroom	Proportion of households with a member having a bank account
Use of toothpaste	

Source: CWIQ 2006 Karagwe DC

Table 1.2 : Predicted and Observed Poverty Rates, Kagera Rural, 2000/01

Predicted	Observed		
	Non-Poor	**Poor**	**Total**
Non-Poor	60.9	10.9	71.8
Poor	7.9	20.3	28.2
Total	68.8	31.3	100.0

Source: HBS 2000/01

The respondent was the most informed person in the household, as identified by the members of the household. A weight and height measurement was taken by the interviewers for each individual under the age of 5 (60 months) in the surveyed households.

Finally, the data entry was done by scanning the questionnaires, to minimise data-entry errors and thus guarantee the quality of the data.

1.3 Constructed variables to disaggregate tables

The statistics in most tables in this report will be disaggregated by certain categories of individuals or households. Some of these variables have been constructed by the analysts and, in the light of their prominence in the report, deserve more explanation. This chapter discusses some of the most important of these variables: poverty status, cluster location and socio-economic group.

1.3.1 Poverty Status

The poverty status of a household is obtained by measuring its consumption expenditures and comparing it to a poverty line. It is, however, 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.

There is a core set of variables that are incorporated in the majority of surveys. These variables inform on household assets and amenities, level of education of the household head, amount of land owned by the household and others. By observing the relation between these variables and 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 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 be non-poor 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.

For the purpose of this report, 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. The five-year gap is far from ideal, but the data itself is reliable and is the most recent source of information available. Work was then done to investigate the specific characteristics of Karagwe in order to ensure that the model developed accurately represents this particular district.

Table 1.3: Cluster Location

| | Median Time (in minutes) to: | | | Poverty Rate | Estimated Number of Households |
	District Capital	All-Weather Road	Public Transport		
Cluster Location					
Accessible	10	6	120	9.1	44,355
Remote	90	60	240	31.7	47,040

Source: CWIQ 2006 Karagwe DC

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 1.1 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 B1 in Annex 2.

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 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. With this procedure, the Basic Needs Poverty Line is set at TZS 7,253 per 28 days per adult equivalent unit in 2000/01 prices. Households consuming less than this are assumed to be unable to satisfy their basic food and non-food needs[1].

The Karagwe 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 generates 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. Results of this exercise are presented in Table 1.2. The model wrongly predicts a non-poor household to be poor in 7.9 percent of the cases, and vice versa in 10.9 percent of the households. This gives an overall percentage of correct predictions of 81.2 percent.

When the model is applied to the CWIQ data for Karagwe 2006, the estimated population living in poverty is 21 percent, very much consistent with the 23 percent estimated with HBS for Kagera Rural.

However, it must be kept in mind that the aim of the model is not estimating poverty rates, but to determine the characteristics of the poor population. Hence, the accuracy of the model does not hinge on the closeness between the estimated and actual poverty rate; but on the percentage of correct predictions as indicated in Table 1.2.

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[1] The exact procedure by which this line has been set is described in detail in the 2000/01 HBS report: National Bureau of Statistics, 2002, "*2000/2001 Tanzania Household Budget Survey*".

1 Introduction

Table 1.4: Socio-economic Group, Poverty Rate, and Location

| | Poverty Rate | Percentage Living in | |
		Remote Clusters	Accessible Clusters
Socio-Economic Group			
Employees	7.3	43.1	56.9
Self-Employed Agriculture	22.3	54.3	45.7
Self-Employed Other	7.5	28.2	71.8
Other	20.3	42.7	57.3

Source: CWIQ 2006 Karagwe DC

Table 1.3 shows that the poverty rates differ substantially by cluster location: households in remote villages are more likely to be poor than households in accessible villages. Whereas the poverty rate in accessible villages is 9 percent, the figure for remote villages is more than three times higher, at 32 percent.

1.3.3 Socio-economic Group

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 are divided into two groups, depending on whether they work in agriculture ('Self-employed agriculture') or in trade or professional sectors ('Self-employed other'). Finally, those who worked in other activities or who had not been working for the 4 weeks preceding the survey are classed as 'other'.

Table 1.4 shows that the poverty rate is highest for households headed by an individual in the "self-employed agriculture" or "other" category and lowest for households where the head is an employee or is self-employed in non-agricultural activities. Households in the categories "employee" and "self-employed other" are more likely to be located in accessible villages, whereas the categories "self-employed agriculture" and "other" are associated with households located in remote villages.

The gender composition of the socio economic group is shown in Table 1.5. Roughly, 4 out of 5 households are headed by a male. Heads working as employees and self-employed in non-agricultural activities are overwhelmingly males. Female household heads are mostly self-employed in agriculture or in the "other" category.

Table 1.6 shows the breakdown of socio economic groups by main activity of the household heads. As expected, the main economic activity in the district is agriculture, to which 88 percent of household heads are dedicated.

Expenditure surveys, such as the 2000/2001 Household Budget Survey, are much better suited for informing on poverty rates. However, such large scale surveys have insufficient number of observations to inform on district-level trends. The Karagwe 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.

1.3.2 Cluster Location

Cluster Location is constructed on the basis of self-reported travel time of the household to three different locations: the nearest place to get public transport, the nearest all-weather road and the district capital. Travel time is probed for by the household's most commonly used form of transport. For each household, the average travel time is taken across these three locations. For each cluster, the median of the 15 means is calculated. All clusters are then ranked according to this median. The 15 clusters with the lowest median are labelled as accessible and the 15 clusters with the highest median are labelled as remote. Table 1.3 shows the median of each of the variables used to construct the cluster location.

Table 1.5: Socio-economic Group and Gender of the household head

	Male	Female	Total
Socio-economic Group			
Employees	87.4	12.6	100.0
Self-Employed Agriculture	80.8	19.2	100.0
Self-Employed Other	100.0	0.0	100.0
Other	54.4	45.6	100.0
Total	80.6	19.4	100.0

Source: CWIQ 2006 Karagwe DC

Employees are mostly dedicated to mining, manufacturing, energy or construction, with a share of 76 percent; though an important share of them (24 percent) is dedicated to agriculture. The self-employed in non-agricultural activities are mostly dedicated to services (93 percent). The "other" category is mostly divided between agriculture (61 percent) and household duties (32 percent).

Table 1.6: Socio-economic Group and Main Economic Activity

	Agriculture	Mining ManufacturingEnergy Construction	Private and Public Services	Household Duties	Other	Total
Socio-economic Group						
Employees	23.8	76.2	0.0	0.0	0.0	100.0
Self-Employed Agriculture	98.1	0.4	1.5	0.0	0.0	100.0
Self-Employed Other	3.7	3.7	92.6	0.0	0.0	100.0
Other	60.6	0.0	0.0	31.7	7.7	100.0
Total	87.5	3.5	7.5	1.2	0.3	100.0

Source: CWIQ 2006 Karagwe DC

1 Introduction

2   VILLAGE, POPULATION AND HOUSEHOLD CHARACTERISTICS

This chapter provides an overview of the Karagwe DC households and population characteristics. The main population characteristics are presented in section two. Section three presents the main characteristics of the households, such as area of residence, poverty status, number of members, and dependency ratio. The same analysis is then conducted for the household heads in section four. An examination of orphan and foster status in the district concludes the chapter.

2.1   Main Population Characteristics

Table 2.1 shows the percent distribution of the population by cluster location and poverty status, by gender and age. Overall, the district's population is young. For instance, 5 percent of the population is over 60 years old, whereas 50 percent is under 15 years old. The remaining 45 percent is between 15 and 59 years old. The location of the household does not seem to show strong correlation with the age of the population. However, poverty status does seem to be correlated with age. People from non-poor households seem to be slightly older than the poor.

The dependency ratio of the district's households is shown in Table 2.2. The dependency ratio is the number of household members under 15 and over 64 years old (the dependant population) over

the number of household members aged between 15 and 64 (the working age population). The result is the average number of people each adult at working age takes care of.

The mean dependency ratio is 1.2, meaning that one adult has to take care of more than 1 person. There seems to be no strong correlation between cluster location and the dependency ratio. However, on average poor households present a higher dependency ratio (1.5) than non-poor households (1.1).

The dependency ratio increases with the number of household members, from 0.6 for households with 1 or 2 members, to 1.5 for households with 7 or more members. The breakdown by socio-economic group of household shows the 'other' group has the highest dependency ratio (1.4), whereas the self-employed in non-agricultural activities has the lowest (0.9). There are no strong differences by gender of the household head.

Table 2.3 shows the percent distribution of households by number of household members. The mean household size is 4.9 individuals. Households with at most two individuals only represent 15 percent of all households in the district. Households with 3 to 6 members represent 60 percent of the total.

Table 2.1: Percent distribution of total population by gender and age

	Male				Female				Total			
	0-14	15-59	60+	Total	0-14	15-59	60+	Total	0-14	15-59	60+	Total
Total	26.6	20.7	2.3	49.6	23.9	23.7	2.8	50.4	50.5	44.3	5.1	100.0
Cluster Location												
Accessible	26.6	20.9	2.6	50.1	23.0	24.0	2.9	49.9	49.5	44.9	5.5	100.0
Remote	26.7	20.4	2.0	49.1	24.8	23.4	2.7	50.9	51.5	43.8	4.8	100.0
Poverty Status												
Poor	34.5	16.0	0.7	51.2	25.2	22.3	1.4	48.8	59.7	38.3	2.1	100.0
Non-poor	23.6	22.4	3.0	48.9	23.5	24.2	3.4	51.1	47.0	46.6	6.3	100.0

Source:CWIQ 2006 Karagwe DC

2 Village, Population and household characteristics

Table 2.2: Dependency ratio

	0-4 years	5-14 years	0-14 years	15-64 years	65+ years	Total	Dependency ratio
Total	1.0	1.5	2.5	2.3	0.2	4.9	1.2
Cluster Location							
Accessible	0.9	1.5	2.4	2.2	0.2	4.9	1.2
Remote	1.1	1.5	2.6	2.3	0.1	5.0	1.2
Poverty Status							
Poor	1.7	2.2	3.9	2.6	0.1	6.5	1.5
Non-poor	0.8	1.3	2.1	2.2	0.2	4.5	1.1
Household size							
1-2	0.0	0.1	0.2	1.0	0.4	1.6	0.6
3-4	0.9	0.5	1.4	1.9	0.2	3.5	0.8
5-6	1.2	1.7	2.9	2.4	0.2	5.4	1.3
7+	1.5	3.4	4.9	3.3	0.1	8.3	1.5
Socio-economic Group							
Employee	0.9	1.9	2.8	2.8	0.0	5.6	1.0
Self-employed - agric	1.0	1.5	2.5	2.2	0.2	4.9	1.2
Self-employed - other	1.0	1.3	2.2	2.5	0.0	4.8	0.9
Other	0.8	1.9	2.7	2.3	0.5	5.4	1.4
Gender of Household Head							
Male	1.1	1.5	2.7	2.4	0.2	5.2	1.2
Female	0.6	1.3	1.8	1.7	0.3	3.9	1.2

Source:CWIQ 2006 Karagwe DC

Table 2.3: Percent distribution of households by number of household members

	1-2 persons	3-4 persons	5-6 persons	7+ persons	Total	household size
Total	14.8	30.4	31.4	23.4	100.0	4.9
Cluster Location						
Accessible	14.2	33.3	30.6	21.9	100.0	4.9
Remote	15.4	27.6	32.1	24.9	100.0	5.0
Poverty Status						
Poor	0.0	19.2	36.6	44.2	100.0	6.5
Non-poor	18.8	33.5	29.9	17.8	100.0	4.5
Socio-economic Group						
Employed	0.0	39.6	24.5	35.9	100.0	5.6
Self-employed - agriculture	15.9	29.8	30.1	24.3	100.0	4.9
Self-employed - other	9.6	36.7	38.2	15.4	100.0	4.8
Other	14.0	27.6	45.7	12.8	100.0	5.4
Gender of Household Head						
Male	12.1	28.3	32.5	27.1	100.0	5.2
Female	26.2	39.5	26.4	7.9	100.0	3.9

Source:CWIQ 2006 Karagwe DC

The breakdown by cluster location shows no strong differences in mean household size. However, the breakdown by poverty status shows that poor households are significantly bigger than non-poor. Over 40 percent of them have 7 or more members, compared to just 15 percent of non-poor, with mean household sizes of 6.5 and 4.5 members, respectively.

Regarding socio-economic groups, the employees and 'other' have the higher mean household size, 5.6 and 5.4, than the self-employed groups, at 4.9 and 4.8, respectively.

Finally, households headed by males are larger than female headed households: the former have 5.2 members in average, whereas the latter have only 3.9 members. This difference partly owes to the fact that, as shown in Section 2.4, female household heads rarely have a spouse.

Table 2.4: Percent distribution of total population by relationship to head of household

	Head	Spouse	Child	Parents	Other relative	Not related	Total
Total	20.3	15.7	54.9	0.7	8.2	0.2	100.0
Cluster Location							
Accessible	20.5	16.6	54.4	0.3	8.1	0.2	100.0
Remote	20.1	14.9	55.4	1.1	8.3	0.3	100.0
Poverty Status							
Poor	15.3	13.2	61.8	0.6	8.9	0.2	100.0
Non-poor	22.2	16.7	52.2	0.7	8.0	0.2	100.0
Age							
0- 9	0.0	0.0	89.6	0.0	10.3	0.2	100.0
10-19	1.0	2.7	81.1	0.0	14.6	0.5	100.0
20-29	28.5	43.9	21.4	0.0	5.9	0.3	100.0
30-39	50.3	45.7	3.8	0.0	0.3	0.0	100.0
40-49	65.9	29.5	2.1	2.5	0.0	0.0	100.0
50-59	65.8	29.4	1.6	3.2	0.0	0.0	100.0
60 and above	73.3	15.1	0.0	8.0	3.6	0.0	100.0
Gender							
Male	33.3	0.1	58.3	0.1	7.8	0.3	100.0
Female	7.4	31.1	51.5	1.2	8.6	0.2	100.0

Source:CWIQ 2006 Karagwe DC

2.2 Main Household Characteristics

Table 2.4 shows the percent distribution of total population by relationship to the head of household.

No particular trends emerge by analysing by remoteness or poverty status. When analysing by age-groups, it is clear that the category 'other relatives' is mostly comprised by children under 19 years old. This highlights the importance of the analysis of fostering and orphan status. After 30, most of the population is either head of their own household or spouse to the head of the household.

The gender split-up shows that males are more likely to be household heads than females, with shares of 33 and 7 percent, respectively. In turn, spouses and parents are overwhelmingly females.

Table 2.5 shows the percent distribution of the population age 12 and above by marital status. Overall, 35 percent of the population has never been married. In addition, 40 percent is married and

Monogamous and 10 percent is married and polygamous. Despite less than 1 percent being 'officially' divorced, up to 5 percent of the population is 'unofficially'

separated. Informal unions constitute only 5 percent of the population and 6 percent is widowed.

Members of poor households are more likely to be in informal unions, whereas non-poor households are more likely to be in a monogamous marriage. But there are no strong differences by cluster location.

The age breakdown shows that polygamous-married category peaks at the 50-59 group, with almost one-third of the individuals in that age-group being in a polygamous marriage. For the population after 20 years old, married-monogamous is the most common category, except for the population aged 60 and over, where widowed is the most common category. Divorce does not show a trend but, as would be expected, the categories 'separated' and 'widowed' both increase with age. 'Never married' also shows correlation with age, decreasing as the population gets older.

Around 40 percent of the men have never been married, but for women the figure is only 30 percent. While 11 percent of women are widowed, only 1 percent of men are in this category. Furthermore, females tend to be separated more commonly than men, who are more commonly married.

2 Village, Population and household characteristics

Table 2.5: Percent distribution of the total population age 12 an above by marital status

	Never married	Married monogamous	Married polygamous	Informal, loose union	Divorced	Separated	Widowed	Total
Total	34.7	39.8	9.5	4.9	0.1	4.6	6.3	100.0
Cluster Location								
Accessible	34.8	40.3	10.3	4.8	0.0	4.3	5.4	100.0
Remote	34.7	39.4	8.8	5.0	0.2	4.8	7.2	100.0
Poverty Status								
Poor	36.2	33.8	9.7	9.2	0.0	5.9	5.3	100.0
Non-poor	34.1	41.7	9.6	3.6	0.1	4.2	6.7	100.0
Age								
12-14	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
15-19	91.1	6.8	0.7	1.0	0.0	0.4	0.0	100.0
20-24	38.5	53.2	1.2	3.0	0.0	3.1	1.0	100.0
25-29	7.0	62.7	11.4	11.9	0.0	6.4	0.5	100.0
30-39	1.9	68.1	12.9	9.4	0.0	5.9	1.8	100.0
40-49	0.7	50.5	23.2	7.5	0.0	6.5	11.6	100.0
50-59	0.0	35.1	31.8	1.6	0.0	6.2	25.3	100.0
60 and above	0.4	41.5	9.3	1.5	1.2	12.5	33.7	100.0
Gender								
Male	40.3	41.8	9.1	5.1	0.0	2.3	1.4	100.0
Female	29.7	38.1	9.9	4.7	0.2	6.7	10.8	100.0

Source:CWIQ 2006 Karagwe DC

Table 2.6: Percent distribution of the total population age 5 and above by socio-economic group

	Employed	Self-employed Agriculture	Self-employed Other	Other	Total
Total	1.2	26.0	2.4	70.4	100.0
Cluster Location					
Accessible	1.9	24.2	3.6	70.3	100.0
Remote	0.5	27.7	1.2	70.5	100.0
Poverty Status					
Poor	0.0	24.3	0.5	75.2	100.0
Non-poor	1.5	26.7	3.1	68.7	100.0
Age					
5- 9	0.0	0.0	0.0	100.0	100.0
10-14	0.0	0.0	0.0	100.0	100.0
15-19	0.0	5.4	0.0	94.6	100.0
20-29	0.9	32.7	6.3	60.0	100.0
30-39	3.6	50.2	5.1	41.1	100.0
40-49	5.2	68.9	3.3	22.5	100.0
50-59	2.9	66.7	4.4	26.1	100.0
60 and above	0.0	61.2	1.2	37.6	100.0
Gender					
Male	1.9	36.9	4.0	57.2	100.0
Female	0.6	15.5	0.8	83.1	100.0

Source:CWIQ 2006 Karagwe DC

Table 2.6 shows the percent distribution of the population age 5 and above by socio-economic group. Overall, roughly one quarter of the population is self-employed in agriculture, with 70 percent in other activities. Individuals living in remote villages seem to be somewhat more likely to be self-employed in agriculture, as non-poor households. Members of non-poor households are also more likely be employees than poor households, who have a higher share in the 'other' category.

The analysis of the age-groups is particularly interesting. The share of self-employed in agriculture increases with age, peaking at 69 percent for the 40 to 49 group. The category 'other' decreases

Table 2.7: Percent distribution of the total population age 5 and above by highest level of education

	None	Nursery school	Some primary	Completed primary	Some secondary	Completed secondary	Post secondary	Total
Total	32.2	5.6	32.3	25.8	2.2	0.2	1.8	100.0
Cluster Location								
Accessible	27.9	4.7	31.6	29.5	3.1	0.3	2.8	100.0
Remote	36.4	6.5	32.9	22.1	1.3	0.0	0.7	100.0
Poverty Status								
Poor	41.7	7.0	30.4	19.6	0.9	0.0	0.4	100.0
Non-poor	29.0	5.2	32.9	28.2	2.5	0.2	2.1	100.0
Age								
5- 9	69.9	17.6	12.4	0.0	0.0	0.0	0.0	100.0
10-14	9.3	9.0	81.7	0.0	0.0	0.0	0.0	100.0
15-19	8.3	1.4	51.0	28.0	8.5	0.0	2.7	100.0
20-29	26.5	1.5	11.0	54.7	3.8	0.9	1.6	100.0
30-39	22.5	0.2	10.4	61.4	1.8	0.0	3.8	100.0
40-49	30.5	0.0	21.1	42.9	2.8	0.0	2.7	100.0
50-59	39.1	0.0	41.2	14.1	0.3	0.0	5.2	100.0
60 and above	61.7	1.2	29.5	3.3	1.3	0.0	2.9	100.0
Gender								
Male	27.2	6.5	35.7	25.8	2.4	0.3	2.0	100.0
Female	36.9	4.7	28.9	25.8	2.0	0.0	1.6	100.0

Source:CWIQ 2006 Karagwe DC

steadily with age, showing a sharp decrease between 15-19 and 20-29, from 95 to 60 percent, then decreases steadily until stabilising at around 25 percent for the population between 40 and 59, and finally increases to 38 percent for the population aged 60 and above.

The gender breakdown shows that males are much more likely to be employees or self-employed than women. In turn, females are more likely to be in the 'other' category, with a share of 83 percent against 57 percent for the males.

Table 2.7 shows the percent distribution of the total population aged 5 and above by highest level of education. Of each ten people, roughly 4 have no formal education, 3 have at most some primary, and 3 have completed primary.

The breakdown by cluster location shows that individuals from accessible villages have higher shares in the higher education levels than individuals from remote villages, who are more concentrated in the lower levels of education. A similar trend is observed when analysing by poverty status.

The age breakdown shows that 70 percent of the children between 5 and 9 have no formal education, but 82 percent of the children 10-14 have at least some primary. Rates of no education are lowest for the population 10-19 (9 and 8 percent for the 10-14 and 15-19 groups, respectively) and higher for the older groups. In the groups between 20 and 49 years old, the most common is completed primary. Just 2 percent of the population has finished secondary education.

The gender breakdown shows that females have a higher share of uneducated population than males: 37 against 27 percent, but at the same time similar shares with complete primary (26 percent) and post-primary education, at slightly less than 5 percent for both groups.

2.3 Main Characteristics of the Heads of Household

Table 2.8 shows the percent distribution of household heads by marital status. Overall, 55 percent of the household heads are married and monogamous, 23 divorced, separated or widowed, 12 percent married and polygamous, 2 percent have never been married and 7 and live in an informal union.

The breakdown by cluster location shows a weak relationship between location and marital status. While in remote villages household heads are more likely to be in the 'never married' category, in accessible

Table 2.8: Percent distribution of heads of household by marital status

	Never married	Married monogamous	Married polygamous	Informal, loose union	Divorced Separated Widowed	Total
Total	2.4	55.2	11.8	7.3	23.3	100.0
Cluster Location						
Accessible	1.2	56.1	13.3	7.1	22.4	100.0
Remote	3.7	54.2	10.3	7.5	24.3	100.0
Poverty Status						
Poor	0.0	53.1	10.9	15.1	20.9	100.0
Non-poor	3.1	55.5	12.1	5.3	24.1	100.0
Age						
15-19	67.4	32.6	0.0	0.0	0.0	100.0
20-29	6.3	75.7	3.4	10.6	3.9	100.0
30-39	1.1	71.1	7.6	9.3	10.9	100.0
40-49	0.0	45.1	19.1	9.6	26.2	100.0
50-59	0.0	27.5	28.8	2.4	41.3	100.0
60 and above	0.5	39.5	9.6	1.9	48.5	100.0
Gender						
Male	3.0	68.4	14.1	9.0	5.5	100.0
Female	0.0	0.3	2.1	0.0	97.6	100.0

Source:CWIQ 2006 Karagwe DC

villages they seem to be more likely to be married and polygamous.

Regarding poverty status, heads of non-poor households are more likely to be single (never married, divorced, separated or widowed). In turn, heads of poor households are more likely to be in informal unions.

Analysis by age-groups shows that married-monogamous is the category with the highest share of household heads between 20 and 49 years old, whereas divorced, separated or widowed is so for the heads of household over the age of 50. Some trends may be extracted from this panel. For instance, the married-monogamous category decreases with age, as 'divorced/separated or widowed' increases. The share of household heads married and polygamous peaks at 29 percent of the 50-59 age-groups.

Overwhelmingly, most female household heads are divorced, separated or widowed (98 percent), whereas for males, this category roughly represents 6 percent. Most male household heads are married, monogamous or polygamous (over 80 percent).

Table 2.9 shows the percent distribution of household heads by socio-economic group. It is worth remembering that the socio-economic group of the household is determined by the type of employment of the main income earner of the household,

who not always the household head. As expected, the great majority of the district's household heads belongs to the self-employed in agriculture, with a share of 84 percent. The self-employed in non-agricultural activities represent 7 percent of the household heads, the 'other' category (unemployed, inactive and household workers) represents 6 percent, and the employees are only 4 percent.

The analysis by location shows that the share of household heads self-employed in agriculture in remote villages is higher than in accessible villages, with shares of 88 and 80 percent, respectively. In accessible villages, household heads are more likely to be in the 'self-employed other' group than heads of households in remote villages, with shares of 10 and 3 percent, respectively.

Heads of poor households belong to the 'self-employed agriculture' group more frequently than non-poor households. On the other hand, the heads of non-poor households belong to the 'employee' or 'self-employed other' groups more often than the heads of poor households.

The breakdown by age of the household head shows interesting insights. First, it is important to notice that the small number of household heads aged 15 to 19 impedes drawing solid statistical conclusions about them, so they will be excluded from the following discussion. For all age-groups, 'self-employed agriculture' is the most

Table 2.9: Percent distribution of heads of household by socio-economic group

	Employed	Self-employed Agriculture	Self-employed Other	Other	Total
Total	3.5	83.8	6.5	6.2	100.0
Cluster Location					
Accessible	4.4	79.5	10.0	6.1	100.0
Remote	2.6	88.0	3.0	6.3	100.0
Poverty Status					
Poor	1.2	91.6	2.4	4.8	100.0
Non-poor	3.8	82.0	7.6	6.6	100.0
Age					
15-19	0.0	100.0	0.0	0.0	100.0
20-29	2.6	82.2	14.1	1.2	100.0
30-39	4.6	84.6	7.6	3.1	100.0
40-49	6.0	84.3	4.0	5.7	100.0
50-59	4.4	85.6	4.4	5.5	100.0
60 and above	0.0	81.7	1.4	16.9	100.0
Gender					
Male	4.0	83.3	7.7	5.0	100.0
Female	1.4	85.7	1.4	11.4	100.0

Source:CWIQ 2006 Karagwe DC

Table 2.10: Percent distribution of heads of household by highest level of education

	None	Some primary	Completed primary	Some secondary	Completed secondary	Post secondary	Total
Total	33.4	21.8	40.3	1.6	0.0	2.8	100.0
Cluster Location							
Accessible	23.1	20.2	50.1	1.7	0.0	4.9	100.0
Remote	43.5	23.5	30.7	1.6	0.0	0.8	100.0
Poverty Status							
Poor	65.5	9.6	24.9	0.0	0.0	0.0	100.0
Non-poor	25.0	25.1	44.6	2.1	0.0	3.2	100.0
Age							
15-19	24.5	75.5	0.0	0.0	0.0	0.0	100.0
20-29	33.5	11.6	54.9	0.0	0.0	0.0	100.0
30-39	20.2	12.1	62.7	1.6	0.0	3.5	100.0
40-49	30.8	18.9	45.6	3.0	0.0	1.5	100.0
50-59	34.4	39.3	17.8	0.5	0.0	8.0	100.0
60 and above	54.4	35.5	4.2	2.7	0.0	3.2	100.0
Gender							
Male	24.3	23.3	47.1	1.8	0.0	3.5	100.0
Female	71.0	16.0	12.0	1.0	0.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

important category, representing at least 4 out of 5 household heads in each age-group. The 'employee' category peaks at 6 percent for the group aged from 40 to 49. The 'self-employed – other' category starts at 14 percent for the 20-29 group and then decreases steadily down to 1 percent for the cohort aged 60 and above. The 'other' category gains importance in the latter group, with a share 17 percent, as it includes the economically inactive population.

The breakdown by gender of the household head shows that in male-headed households, the main income earner is more likely to be an employee or self-employed in non-agricultural activities than in female-headed households. In the latter, the main income earner is more likely to be from the 'other' category.

Table 2.10 shows the percent distribution of the heads of household by highest level of education. Overall, around only 5 percent of the household heads has any

2 Village, Population and household characteristics

Table 2.11 - Orphan status of children under 18 years old

	Children who lost mother only	Children who lost father only	Children who lost both father & mother
Total	2.0	6.6	1.4
Cluster Location			
Accessible	1.7	6.2	1.2
Remote	2.4	6.8	1.5
Poverty Status			
Poor	1.6	8.5	1.8
Non-poor	2.3	5.7	1.2
Age			
0-4	0.7	1.1	0.0
5-9	1.7	4.6	2.2
10-14	4.4	10.4	1.8
15-17	1.5	21.0	2.8
Gender			
Male	1.9	6.1	1.1
Female	2.2	7.1	1.7

Source:CWIQ 2006 Karagwe DC

education after primary. One third of the household heads has no education, 22 percent some primary and 40 percent have completed primary.

The breakdown by cluster location shows that, as would be expected, household heads in remote villages are more likely to have no education than the ones from accessible villages, with shares of 44 and 23 percent, respectively. Furthermore, household heads in accessible villages are more likely to have post-primary education, with a share of 7 percent against 3 percent of household heads in remote villages.

Poverty status is strongly correlated with the education of the household heads. This should be no surprise, since education of the household head is one of the poverty predictors used to define poverty status. However, the difference is still important: while 66 percent of heads of poor households has no education, the share for non-poor is 25 percent. In the other extreme, whereas 5 percent of non-poor household heads has post-secondary studies, the share for poor household heads is virtually null.

The age breakdown shows that 54 percent of household heads aged 60 or over has no education, and a further 35 percent just some primary. Completed primary represents around 55 percent for the groups between 20 and 49; but only 18

percent in the 50-59, where 'some primary' gains importance.

The analysis by gender shows that female household heads are more likely to have no education than males, with rates of 24 and 71 percent, respectively. Half the male household heads has completed primary, against 12 percent of females.

2.4 Orphan and Foster Status

Table 2.11 shows the percent distribution of children under 18 years old who have lost at least one parent. Overall, about 1 percent of children under 18 lost both parents, 2 percent lost only their mother and 7 percent lost only their father. This amounts to 10 percent of all children under 18 who lost at least one parent at the time of the survey.

The age breakdown shows that orphan status is correlated with age: as can be expected older children are more likely to be orphans than younger children. Around 26 percent of the children between 15 and 17 years lost a parent, and 24 of the children in that age-group lost their father. There does not seem to be a gender trend in orphan status.

The percent distribution of children under 18 years old by foster status is shown in Table 2.12. A child is defined as living in a nuclear household when both parents live in the household and as living in a non-nuclear household when at least one parent is absent from the household. Note that this makes it a variable defined at the level of the child, rather than the household (a household may be nuclear with respect to one child, but not with respect to another). The table shows that 40 percent of children under 18 were living in non-nuclear households at the time of the survey.

Overall, 43 percent the children from remote clusters live in non-nuclear households. There is no strong relation between cluster location and foster status, but children from poor households tend to be fostered more often than children from non-poor households (with shares of 10 and 6 percents, respectively).

The analysis of age-groups shows that the share of children living in non-nuclear households increases with age, but is

lower and relatively constant for children living with their father only.

Finally, there appears to be no strong correlation between gender and foster status.

Table 2.12 - Foster status of children under 18 years old

	Children living with mother only	Children living with father only	Children living with no parents	Children living in non-nuclear households
Total	11.3	3.5	8.7	23.5
Cluster Location				
Accessible	10.8	3.1	9.1	22.9
Remote	11.7	4.0	8.4	24.1
Poverty Status				
Poor	16.2	1.1	6.0	23.4
Non-poor	9.1	4.7	10.1	23.9
Age				
0-4	9.0	1.9	2.8	13.7
5-9	8.7	3.2	10.3	22.2
10-14	13.8	5.8	13.8	33.5
15-17	19.6	4.1	12.4	36.1
Gender				
Male	12.0	3.6	7.6	23.2
Female	10.5	3.5	9.9	23.9

Source:CWIQ 2006 Karagwe DC

3 EDUCATION

This chapter examines selected education indicators in Karagwe district. These include literacy rate, access to schools, satisfaction rate, dissatisfaction rate and enrolment.

The first section presents an overview on selected education indicators. The second section provides information on dissatisfaction and non-attendance along with the reasons behind them. School enrolment and drop-out rates are presented in the fourth section. These give a picture on the enrolment patterns according to the age of pupils. The final section of the chapter gives information on adult and youth literacy status within the district.

3.1 Overview of the Education indicators

3.1.1 Literacy

Table 3.1 shows the main education indicators for the district. Literacy is defined as the ability to read and write in any language, as reported by the respondent. Individuals who are able to read but cannot write are considered illiterate.

Overall, about two thirds (66 percent) of all adults in this survey are literate. However, there is a large gap in literacy between accessible and remote villages as well as non-poor and poor households. The adult literacy rate in accessible villages is about 16 percentage points higher than that of those from remote villages at 74 and 58 percent respectively. Similarly, literacy rate among individuals living in non-poor households is at 70 percent while individuals living in poor households have a literacy rate of 53 percent.

Data collected for this district further shows that the proportion of literate adults in households headed by an employee is significantly higher than that of adults from households headed by individuals in the 'other' social economic group (which consists of unemployed, inactive or individuals involved in domestic work). Literacy rate is highest among adults living in households headed by employees

at 95 percent, followed by those adults living in households headed by individuals who are self-employed in agriculture at 84 percent, self-employed in non-agriculture sector at 64 percent and the lowest literacy rate is observed in households whose head is from the 'other' category at 57 percent.

Furthermore, literacy rates differ between men and women. The literacy rate among men is about 16 percentage points higher than that of women at 75 and 59 percent respectively.

3.1.2 Primary School Access, Enrolment and Satisfaction

Access

Primary school access 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.

Just above half (51 percent) of primary school-age children live within 30 minutes travel from a primary school. Primary school access is significantly higher in accessible clusters than in remote clusters. Data shows that primary school access among accessible clusters is more than twice as high as that among remote clusters at 68 and 33 percent respectively. Furthermore, children living in non-poor households have a better access to primary schools compared to children living in poor households at 53 and 46 percent respectively. Primary school access is highest among children living in households headed by an individual who is self-employed in agriculture 90 percent, followed by those from households headed by employees (69 percent), 'other' category and lowest among households headed by an individual who is self-employed in non-agriculture sector at 47 percent. However, there is a minimal difference in primary school access among the children living in male and female

headed households at 52 and 49 percent respectively.

Enrolment

There are two measures 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 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 Gross Enrolment Rate may exceed 100 percent. Primary school Gross Enrolment Rate

informs on the ratio of all individuals in primary school-age (7 to 13 years) in the district.

Net Enrolment Rate 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 Net Enrolment Rate 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 in the district.

The Net Enrolment Rate provides more information for analysis than the Gross Enrolment Rate. While trends in actual participation of school-age children in formal education are in part captured by the Net Enrolment Rate, the Gross Enrolment Rate, at best, provides a broad

Table 3.1: Education indicators

	Literacy rate	Primary				Secondary			
		access	gross enrollment	net enrollment	satisfaction	access	gross enrollment	net enrollment	satisfaction
Total	66.8	51.8	109.6	79.2	46.5	4.6	14.2	11.8	46.9
Cluster Location									
Accessible	74.4	69.5	112.0	82.9	51.8	8.8	22.8	20.3	45.8
Remote	59.2	34.5	107.3	75.6	41.2	0.7	6.2	3.8	50.9
Poverty Status									
Poor	53.6	45.9	94.3	73.8	43.5	0.0	11.6	8.5	65.9
Non-poor	70.5	54.0	116.8	81.8	48.0	6.0	14.0	11.8	42.0
Socio-economic Group									
Employee	92.4	62.4	113.6	70.6	71.4	15.7	48.7	32.3	68.8
Self-Employee - agric	64.6	48.2	110.3	79.9	44.1	2.7	10.7	10.1	40.1
Self-Employee - other	85.1	90.4	114.1	90.7	70.0	28.5	22.7	15.6	100.0
Other	59.3	60.3	97.9	71.1	41.8	0.0	24.4	14.1	10.6
Gender									
Male	75.2	52.7	110.1	79.7	47.7	5.0	13.5	10.8	27.3
Female	59.5	50.9	109.1	78.7	45.2	4.2	14.8	12.7	62.8
Orphan status									
Orphaned	84.5	54.4	119.5	70.6	44.1	1.8	5.3	5.3	0.0
Not-orphaned	84.0	51.5	107.4	80.7	46.6	5.2	12.5	12.5	55.8
Foster status									
Fostered	72.9	53.5	95.8	80.0	55.1	11.5	6.9	6.9	0.0
Not-fostered	86.4	51.0	111.5	79.9	44.8	3.5	11.0	11.0	55.2

Source:CWIQ 2006 Karagwe DC

1. Literacy is defined for persons age 15 and above.

2. Primary school:

   Access is defined for children of primary school age (7-13) in households less than 30 minutes from a primary school.

   Enrollment (gross) is defined for all persons currently in primary school (Kindergarden, Grade 1 to Grade 8) regardless of age.

   Enrollment (net) is defined for children of primary school age (7-13) currently in primary school (Kindergarden, Grade 1 to Grade 8).

   Satisfaction is defined for all persons currently in primary school who cited no problems with school.

3. Secondary school:

   Access is defined for children of secondary school age (14-19) in households less than 30 minutes from a secondary school.

   Enrollment (gross) is defined for all persons currently in secondary school (Form 1 to Form 5) regardless of age.

   Enrollment (net) is defined for children of secondary school age (14-19) currently in secondary school (Form 1 to Form 5).

   Satisfaction is defined for all persons currently in secondary school who cited no problems with school.

indication of the general participation in education and of the capacity of the schools. The Gross Enrolment Rate gives no precise information regarding the proportion of individuals of school and non-school-ages at school, nor does it convey any information on the capacity of the schools in terms of quality of education provided.

The primary school Gross Enrolment Rate in the district is currently at 113 percent. This figure indicates that all individuals who are at primary school constitute 113 percent of all children of primary school-age in the district. The Net Enrolment Rate further shows that 80 percent of all primary school-age children are currently attending school. The Gross Enrolment Rate is almost the same for clusters located in remote and those located in accessible areas. However, Net Enrolment Rate is higher among clusters located in accessible areas than that of clusters located in remote areas at 83 and 77 percent respectively.

Disaggregation of the enrolment data by selected household characteristics shows that primary school enrolment rates vary significantly by poverty status and socio-economic status. Both Gross Enrolment Rate and Net Enrolment Rate are higher among people living in non-poor than poor households are. While the Gross Enrolment Rate is significantly higher among people living in non-poor households than that of those living in poor households, at 121 and 96 percent respectively, the Net Enrolment Rate among non-poor households is about 8 percentage points higher than that among poor households at 83 and 75 percent respectively.

Whereas, Gross Enrolment Rate is highest among people living in households headed by employees and Net Enrolment Rate is highest among households where the head is employed in agriculture sector, in both cases, Gross Enrolment rate and Net enrolment Rate are lowest among households headed by an individual belonging to the 'other' socio-economic group.

Satisfaction

The satisfaction rate informs on the proportion of primary school pupils who cited no problems with their schools.

Information on satisfaction was obtained by asking respondents to identify problems they faced with their schools.

46 percent of all primary school pupils are satisfied with the schools they are attending. Pupils living in households located in accessible clusters seem to be more satisfied than those living in remote clusters at 51 and 40 percent respectively. Similarly, pupils living in non-poor households are more satisfied with the schools they attend compared to those living in poor households at 48 and 42 percent respectively. Respondents living in households headed by non-agriculture self-employed individuals tend to be least satisfied with their primary schools at 42 percent, while households headed by employees, have the highest satisfaction rate (71percent). Lastly, it is observed that the difference in satisfaction between male and female headed households is minimal at 48 and 44 percent respectively.

3.1.3 Secondary School Access, Enrolment and Satisfaction

Access

Secondary school access rate is defined as the proportion of secondary school-age children (14 to 19 years) reporting to live within 30 minutes of travel from the nearest secondary school.

Only 5 percent of all pupils in secondary school live within 30 minutes travel to the nearest secondary school. This is a very small percentage compared to that of primary school (51 percent).

Data shows that location and poverty status of the household are correlated to secondary school access rate. Secondary school access rate is higher in accessible clusters than in remote clusters at 9 and 1 percent respectively. Similarly, whereas non of the pupils in secondary school living in poor households live within 30 minutes travel to the nearest secondary school, the access rate for individuals living in non-poor households is at 6 percent.

It is observed that members living in households whose head is self-employed

in agriculture have the highest access rate to secondary school of 29 percent followed by those living in households headed by employees (16 percent) self employed in non-agriculture (3 percent) and non of the members living in households whose head belongs to the 'other' socio-economic group live within 30 minutes travel to the nearest secondary school.

Enrolment

As explained elsewhere before, Gross Enrolment Rate is defined as the ratio of all individuals attending school, irrespective of their age, to the population of children of school-age while the Net Enrolment Rate is defined as the ratio of children of school-age currently enrolled at the school to the population of children of school-age. The secondary school Gross Enrolment and Net Enrolment Rate is calculated using population of the age-group 14 to 19 years.

The Gross Enrolment Rate and Net Enrolment Rate at secondary school are very low compared to primary school level. Only 12 percent of children of secondary school-age are currently enrolled in secondary school. There is an additional 2 percent of the population enrolled in secondary school but their age is outside the identified secondary school-age range. This is a very small percentage compared to that of primary school.

It is observed that the difference in Gross Enrolment Rate and Net Enrolment Rate between people living in accessible clusters is about 4 times as high as that of people living in remote clusters. Poverty status of the household shows to be slightly correlated with the Gross Enrolment Rate as poor households have a Gross Enrolment Rate of 10 percent while non-poor households have a 14 percent

Gross Enrolment Rate. Furthermore, data shows that the difference in secondary school Net Enrolment Rate between poor and non-poor households and that between males and females is only about 2 percent.

Individuals living in households headed by employees have the highest Net Enrolment Rate and Gross Enrolment Rate of 32 and 49 percent respectively, while those living in households headed by self-employed in non-agriculture have the lowest secondary school Net Enrolment rate and Gross Enrolment Rate of about 10 percent.

Satisfaction

About half (49 percent) of the total population enrolled in secondary school are satisfied with their schools. This satisfaction rate is slightly higher than in primary schools (46 percent). The satisfaction rate for people living in accessible clusters is significantly lower than that of those living in remote clusters at 46 and 61 percent respectively.

It is observed that secondary school satisfaction rate for people living in poor households are nearly double that of those living in non-poor households at 82 and 42 percent respectively. Whereas all respondents living in households where the head is self-employed in agriculture are satisfied with their schools, people living in households where the head is from the 'other' category have the lowest satisfaction rate of 16 percent, followed by individuals from households whose head is self-employed in non-agriculture sector at 40 percent.

Among individuals currently enrolled in secondary school, females are more satisfied with their schools than males. The satisfaction rate for females is more than twice as high as that of males at 67 and 27 percent respectively.

Table 3.2: Percentage of students currently enrolled in school by reasons for dissatisfaction

	Percent dissatisfied	Reasons for dissatisfaction							
		Books/ supplies	Poor Teaching	Lack of teachers	Teachers absent	Lack of space	in bad condition	High fees	Other
Total	51.2	20.0	11.4	48.2	4.6	28.9	48.7	8.0	3.7
Cluster Location									
Accessible	45.6	27.8	14.4	54.6	5.5	31.1	42.0	9.3	3.9
Remote	57.7	12.8	8.6	42.3	3.7	26.9	54.8	6.8	3.6
Poverty Status									
Poor	54.5	20.6	15.8	45.0	7.1	22.1	56.4	8.0	1.1
Non-poor	49.9	18.6	7.9	48.3	3.7	30.0	46.8	8.2	4.8
Socio-economic Group									
Employee	26.4	44.3	49.2	62.4	7.4	49.2	43.4	0.0	0.0
Self-employed - agric	53.8	18.4	10.9	48.1	3.4	28.4	51.5	7.7	4.0
Self-employed - other	26.6	71.9	12.5	12.5	7.6	45.5	31.9	10.4	10.4
Other	60.6	10.2	3.8	55.0	13.4	21.5	30.3	13.1	0.0
Gender									
Male	51.2	20.1	11.2	43.1	4.1	33.2	50.2	9.7	4.6
Female	51.2	19.9	11.7	53.6	5.1	24.3	47.1	6.2	2.8
Type of school									
Primary	53.2	19.9	10.9	49.8	3.9	30.8	51.2	4.3	3.4
Government	54.5	20.0	11.0	50.2	3.9	30.6	51.2	4.0	3.5
Private	7.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Other	32.9	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0
Secondary	53.1	29.8	22.9	38.6	15.0	31.7	27.0	32.0	5.2
Government	54.8	44.6	33.5	50.9	26.5	44.0	35.5	0.0	0.0
Private	49.5	13.2	11.4	28.2	0.0	19.7	19.7	67.1	15.0
Other	57.9	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Other	40.7	16.1	9.5	41.9	4.2	15.6	42.6	21.0	4.9
Government	40.8	13.9	7.0	41.6	6.1	20.0	51.9	11.0	3.5
Private	43.0	37.1	26.2	64.6	0.0	0.0	27.2	21.8	13.6
Other	37.7	0.0	0.0	13.6	0.0	13.6	15.8	70.6	0.0

Source:CWIQ 2006 Karagwe DC

Gender is B1, Age is B4, Rural is UrbRur = 1, Urban is UrbRur = 2

3.2 Dissatisfaction

One of the aims of the survey is to inform on perceptions of quality of services received among individuals for whom these services are provided. To obtain the information, primary and secondary 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 conditions of facilities. The questionnaire allowed a good collection of dissatisfaction data as there were eight options for dissatisfaction including the "others" category.

Just above half (51 percent) of students enrolled in primary or secondary school reported dissatisfaction with the schools they were attending. Out of the dissatisfy individuals, 51 percent reported to be dissatisfied due to facilities in bad condition (Table 3.2), 49 percent reported dissatisfaction because of lack of teachers and 31 percent of all students reported dissatisfaction with their schools because of lack of space.

People living in accessible clusters seem to be less dissatisfied than those living in remote clusters. The dissatisfaction rate for people living in accessible clusters is 12 percentage points less than that of people living in remote clusters at 46 and 58 percent respectively. However, the difference in dissatisfaction rates between poor and non-poor households appear to

3 Education

Table 3.3: Percentage of children 6-17 years who ever attended school by reason not currently attending

						Reasons not currently attending						
	Percent not attending	Completed school	Distance	Cost	Work	Illness	Pregnancy	Got married	Useless/ uninteresting	Failed exam	Awaits admission	Dismissed
Total	10.8	27.8	1.9	25.4	7.2	8.2	1.7	7.8	9.1	16.1	4.8	0.0
Cluster Location												
Accessible	7.8	30.2	0.0	21.4	8.6	2.9	4.8	5.9	0.0	11.5	9.6	0.0
Remote	13.9	26.3	3.0	27.7	6.3	11.2	0.0	8.9	14.4	18.8	2.0	0.0
Poverty Status												
Poor	12.6	7.9	5.9	22.1	7.9	10.6	5.5	2.0	14.1	10.9	0.0	0.0
Non-poor	10.3	36.9	0.0	26.9	6.8	7.1	0.0	10.5	6.9	18.5	7.0	0.0
Socio-economic Group												
Employed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Self-emp - agric	11.7	29.7	2.1	27.4	8.1	7.0	2.0	8.8	10.3	12.7	5.4	0.0
Self-emp - other	9.5	33.4	0.0	26.3	0.0	0.0	0.0	0.0	0.0	40.3	0.0	0.0
Other	9.6	0.0	0.0	0.0	0.0	28.3	0.0	0.0	0.0	44.4	0.0	0.0
Gender												
Male	8.7	14.1	4.6	38.6	6.1	6.5	0.0	6.1	12.9	19.1	8.5	0.0
Female	12.9	37.3	0.0	16.2	7.9	9.4	3.0	9.0	6.5	14.0	2.2	0.0
Age												
7-13	1.6	0.0	0.0	0.0	0.0	11.5	0.0	0.0	11.7	0.0	0.0	0.0
14-19	26.7	30.6	2.1	28.0	7.9	7.9	1.9	8.6	8.9	17.7	5.3	0.0

Source:CWIQ 2006 Karagwe DC

Gender is B1, Age is B4, Rural is UrbRur = 1, Urban is UrbRur = 2

be minimal at 54 and 50 percent respectively.

Furthermore, data shows that whereas more than half (55 percent) of people living in households where the head is self-employed in non-agriculture are dissatisfied with the schools they attend, only 19 percent of those living in households where the head is self-employed in agriculture report the same. The most prominent reason for dissatisfaction among the pupils living in households headed by employees and those in the 'other' category is lack of teachers, while pupils living in households where the head is self-employed in agriculture are mainly dissatisfied due to lack of books and supplies, and those from households headed by self-employed in non-agriculture are mainly dissatisfied due to facilities in bad condition.

Reasons for dissatisfaction with schools slightly differ depending on whether the person is in primary or secondary school. Those attending primary school report to be most dissatisfied due to facilities in bad condition (53 percent) followed by lack of teachers (50 percent), while those attending secondary school report dissatisfaction due to lack of teachers (42 percent) followed by lack of space (34 percent).

Whereas 4 percent of individuals attending government primary schools raised complaints about high fees, none of the individuals attending government secondary schools reported dissatisfaction due to high fees. On the other hand, all individuals attending private primary schools complained about high fees compared to 59 percent of those attending private secondary schools.

3.3 Non-attendance

Table 3.3 shows the percentage of individuals of primary or secondary school-age (7 to 19 years) currently not attending school and the reasons for not attending. The non-attendance rate is defined as the proportion of individuals of school-age who previously participated in formal education and had stopped attending school by the time of the survey.

The district has about 11 percent of 7 to 19 year olds who are currently not attending school. More than a quarter (29 percent) of this population does not attend school because they have completed standard seven, O-level or A-level. 25 percent of respondents of this population reported non-attendance due to high expenses, while 16 percent were not attending

school because they failed standard four, seven or form four exams. Only about 2 percent of the respondents reported non-attendance due to pregnancy and distance to schools.

Data collected shows that the non-attendance percentage rate of respondents living in remote clusters is nearly double that of those living in accessible clusters at 15 and 8 percent respectively.

There is no difference in the non-attendance rates among children living in poor and non-poor households. However, differences appear when the two groups are broken down by reasons for not attending school. The major reasons for non-attendance for individuals living in poor households is high expenses (24 percent) followed by being uninterested (12 percent). Individuals living in non-poor households report completing school (38 percent) followed by high expenses (26 percent). The percentage rate of respondents from non-poor households not attending school because they have completed standard seven, O-level and A-level is about 4 times as high as that of those from poor households at 38 and 9 percent respectively. While 6 percent of the respondents from poor households are not attending school due to pregnancy none of those from non-poor households reported the same.

Whereas non of the respondents living in households whose head is an employee reported to be out of school, about 10 percent of those from the other socio-economic groups reported not to be attending school.

Nearly all the primary school-aged children attend school, as their non-attendance rate is only 2 percent. On the other hand, 74 percent of secondary school aged individuals attend school. 32 percent of secondary school-aged individuals claim that it is because they have completed school (standard seven, O-level or A-level) while 28 percent say it is because of high expenses.

3.4   Enrolment and Drop-out rates

This section takes a closer look at the primary and secondary school enrolment and drop-out rates. Rather than looking at primary or secondary school-aged children

as a whole, data will be categorized by age and gender. Drop-out rates are calculated by dividing the number of children who left school in the current year by the total number of children enrolled this year plus those that dropped out (children who left school/ (children currently enrolled +children who dropped out).

Primary School

The drop-out rates at primary level are generally very low. The primary school drop-out rate at the time of the survey was only 1 percent. Therefore, only enrolment rates will be analysed.

Overall, 80 percent of primary school-aged children are currently enrolled, out of those within the primary school-age range (7 to 13 years) 79 percent all female children and 81 percent of all male children are enrolled. The required age at which children should start standard one is 7 years. However, data on primary school enrolment shows that at the time of the survey, only 37 percent of all seven year olds were enrolled. Most children are likely to be in school by the age of 11 where the Net Enrolment Rate is at 98 percent.

Table 3.4: Primary school enrollment and drop out rates by gender

	Net enrollment rates			Drop out rates		
	Male	Female	Total	Male	Female	Total
Total	79.7	78.7	79.2	0.8	0.6	0.7
7	41.9	36.0	39.5	0.0	0.0	0.0
8	64.2	75.0	70.1	0.0	0.0	0.0
9	86.0	81.1	83.3	0.0	0.0	0.0
10	90.7	92.8	91.6	2.4	0.0	1.4
11	100.0	88.6	94.3	0.0	0.0	0.0
12	90.2	83.1	86.7	0.0	3.9	1.9
13	92.7	90.6	91.7	2.3	0.0	1.2

Source:CWIQ 2006 Karagwe DC

Base for table is primary school age population (age 7-13)

Table 3.5: Secondary school enrollment and drop out rates by gender

	Net enrollment rates			Drop out rates		
	Male	Female	Total	Male	Female	Total
Total	10.8	12.7	11.8	5.1	7.9	6.6
14	0.0	0.0	0.0	0.0	3.3	1.5
15	2.8	4.9	3.8	0.0	9.0	4.6
16	12.9	19.8	16.5	12.7	5.9	9.2
17	17.9	21.5	20.2	6.0	15.7	12.2
18	20.0	25.2	23.0	8.0	15.7	12.5
19	34.8	9.8	20.2	9.7	0.0	4.0

Source:CWIQ 2006 Karagwe DC

Secondary School

Secondary school enrolment rates are much lower than those at primary level. Only 12 percent of secondary school children are currently enrol compared to 80 percent in primary school. For a person following a normal school curriculum i.e. started standard one with 7 years of age, he/she is expected to start form one at age 14. Table 3.5 shows secondary net enrolment patterns by age. From this table we see that net enrolment rates increase gradually by age up to the age of 18. However, the biggest difference in enrolment rate is observed between age 15 and 16, which suggests that many children join secondary school at the age of 16 lagging 2 years from a person who follows a normal school curriculum. Furthermore, less than a fifth (17 percent) of 16 year olds report to be enrolled by the time of the survey. We also observe that there is no student enrolled in secondary school by the age of 14.

Secondary school drop-out rates among individuals of secondary school-age (14 to 19 years) are substantially higher compared to those of primary school. 7 percent of children of secondary school-age had dropped out of school in the year prior to the survey (table 3.5). In general,

the highest drop-out rate is observed among 18 year olds. The highest drop-out rate among males is at the age of 16 while female drop-out rates are highest at ages 17 and 18.

3.5   Literacy

Literacy is defined as the ability to read and write in at least one language. Those who can read but not write were counted as illiterate. The information on literacy was obtained by asking the respondent if he/she was able to read and write. Besides this information, no further tests on their ability to read or write were taken. Further, questions that helped determine adult literacy were only asked for persons of 15 years or older. Conclusively, this section looks at adult and youth literacy rates by gender, age and residential location.

Adult Literacy

Overall, 66 percent of the population aged 15 and above are literate. The difference in literacy rates among men and women is about 16 percentage points at 75 and 59 percent respectively. Individuals with ages ranging between 15 and 19 years have the highest literacy rate of 84 percent while only 31 percent of those who are above 60 years know how to read and write. In addition, there is a huge difference in literacy among men and women above 60 years. While 58 percent of men within this age range are literate, only 7 percent of women belonging to this group are literate. On the other hand, there is virtually no difference in literacy rates among males and females aged 15 to 19.

The literacy rate in accessible clusters is significantly higher than in remote clusters at 74 and 58 percent respectively. Similarly, data collected shows that the literacy rate among 15 to 19 year olds in accessible clusters is higher than in remote clusters at 93 and 75 percent respectively. In contrast, there exists virtually no difference in literacy rates among 60 and above year olds in remote and accessible clusters. Furthermore, in both remote and accessible clusters men appear to be more literate than women across all age groups.

Table 3.6 - Adult literacy rates by gender (persons age 15 and above)

	Male	Female	Total
Total	75.2	59.5	66.8
15-19 years	84.4	82.4	83.3
20-29 years	75.1	65.5	69.8
30-39 years	75.0	68.7	71.6
40-49 years	74.7	47.4	62.6
50-59 years	78.5	42.4	58.0
60+ years	58.3	7.2	30.4
Accesible	83.0	66.8	74.4
15-19 years	94.0	92.0	92.9
20-29 years	83.4	78.4	80.5
30-39 years	85.4	68.1	76.4
40-49 years	84.9	50.5	68.6
50-59 years	87.9	58.2	72.9
60+ years	54.3	10.0	31.2
Remote	67.2	52.3	59.2
15-19 years	74.8	73.3	74.0
20-29 years	67.9	51.5	59.3
30-39 years	62.4	69.3	66.3
40-49 years	66.3	44.3	57.2
50-59 years	66.4	30.4	43.7
60+ years	63.3	4.3	29.5

Source:CWIQ 2006 Karagwe DC

Base for table is population age 15+

Youth Literacy

This subsection looks at literacy rates among youth by age, gender and residential location. Youth literacy rate is calculated for all persons between 15 and 24 years of age. 78 percent of individuals in this age group are literate. The literacy rate among men in this age range is 79 percent while for women it is 77 percent.

When youth are grouped by age, it appears that 15 to 17 year olds have the highest literacy rate where 85 percent know how to read and write. Youth of 15 to 17 years in both remote and accessible villages have the highest literacy rates. Finally, it is observed that the literacy rate of youth in accessible clusters is about 21 percentage points higher than that of those in remote clusters at 88 and 67 percent respectively.

Table 3.7 - Youth literacy rates by gender (persons age 15-24 years)

	Male	Female	Total
Total	79.0	75.7	77.2
15-17 years	85.2	81.8	83.4
18-20 years	84.5	74.2	78.9
21-22 years	57.3	74.0	65.3
23-24 years	76.0	66.7	70.2
Accessible	89.9	87.5	88.6
15-17 years	95.5	97.2	96.2
18-20 years	87.5	82.4	84.5
21-22 years	81.6	92.2	87.4
23-24 years	87.5	79.1	82.3
Remote	68.5	64.7	66.4
15-17 years	73.4	72.3	72.7
18-20 years	81.7	62.8	72.3
21-22 years	42.1	54.9	47.5
23-24 years	64.3	55.3	58.5

Source:CWIQ 2006 Karagwe DC

Base for table is population age 15-24 years

3 Education

4 HEALTH

This chapter examines health indicators for the population in Karagwe DC. First, selected health indicators are examined for the whole population. The second section analyses the reasons for dissatisfaction with health services. Section three shows the reasons for not consulting a health provider. 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. In section five, this group is disaggregated by the type of health provider used. Section six presents an analysis of child deliveries. The chapter concludes with an analysis of child nutrition indicators.

4.1.   Health Indicators

Throughout this report, a household is said to have access to medical services if it is located within 30 minutes 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. In second place, 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. Thirdly, 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. Finally, the rate of satisfaction with health services is represented by the proportion of people who had consulted a health provider in the 4 weeks preceding the survey and cited no problems with the service received.

Table 4.1 shows medical services indicators. Overall, 21 percent of the households have access to medical services. Conversely, 79 percent of the households in the district do not have access to medical services.

Household in accessible villages have higher access to medical services (35 percent) than households in remote

Table 4.1 - Health Indicators

| | Medical Services | | | |
	Access	Need	Use	Satisfaction
Total	20.6	43.5	41.7	67.7
Cluster Location				
Accessible	34.6	45.4	44.6	67.8
Remote	7.2	41.7	39.0	67.6
Poverty Status				
Poor	8.5	42.5	40.1	76.0
Non-poor	24.5	44.3	42.6	64.8
Socio-economic Group				
Employee	34.9	22.4	23.0	92.1
Self-employee - agriculture	17.2	44.3	42.5	65.9
Self-employee - other	50.7	37.4	40.9	72.9
Other	25.5	52.2	43.5	75.8
Gender				
Male	19.7	41.5	39.3	67.9
Female	21.5	45.5	44.2	67.5
Age				
0-4	16.8	58.7	73.5	64.8
5-9	18.9	42.1	36.8	67.9
10-14	20.9	33.6	28.2	73.5
15-19	23.5	29.7	24.5	58.0
20-29	19.6	33.9	28.5	68.9
30-39	23.6	38.6	35.9	72.2
40-49	19.6	46.0	40.9	75.7
50-59	10.0	42.5	29.3	69.7
60+	28.2	60.0	45.4	64.5

Source: CWIQ 2006 Karagwe DC

1. Access is defined for persons in households less than 30 minutes from a he
2. Need is defined for persons sick or injured in the four week period precedin
3. Use is defined for persons who consulted a health practitioner in the four v preceding the survey.
4. Satisfaction is defined for persons who consulted a health practitioner in th period preceding the survey and who cited no problems.

Base of table is total population

villages (7 percent). Households in accessible villages have slightly higher need rates (44 percent) and use rate (45 percent) compared to households in remote villages who showed need rates of 41 percent and use rates of 39 percent. Both show similar rates of satisfaction at 68 percent.

Non-poor households have higher access rates than poor households (25 percent) almost three times higher than those of Poor households at 9 percent. The breakdown by poverty status does not show sharp differences by need or use. Non-poor households reported lower

satisfaction rates at 65 percent compared to 76 percent reported by poor households.

Regarding socio-economic status, the households where the main income earner is self-employed in other showed the highest access at 51 percent while the lowest rate was reported by households where the main income earner is self-employed in agriculture at 17 percent. The highest need and use rates were cited by households whose main income earner belongs to the 'other' category at 52 percent and 44 percent respectively. In turn, the employee group reported the highest satisfaction rate at 92 percent while the lowest satisfaction rate was reported by households belonging to the self-employed in agriculture at 65 percent.

There are no gender differences in access or satisfaction rates reported by both genders. However, females cited higher need and use rates at 46 percent and 44 percent compared to males, who reported rates of 42 percent and 39 percent respectively.

The lowest access rate was reported by the 50 to 59 group at 10 percent while the highest was reported by the 65+ cohort at 28 percent. The highest need rates correspond to the highest use rates, where the under 5 reported a need rate of 59 percent and a use rate of 74 percent, while the 60+ cohort reported a need rate of 60 percent and a use rate of 45 percent.

The 15 to 19 age-group reported the lowest need rate at 30 percent, the lowest use rate at 25 percent as well as the lowest satisfaction rate at 58 percent. The highest satisfaction rate was reported by the 40 to 49 cohort at 76 percent.

4.2 Reasons for Dissatisfaction

Table 4.2 shows the percentage of population who consulted a health provider in the 4 weeks preceding the survey and were not satisfied. Overall, 3 in 10 users of healthcare facilities is dissatisfied, mostly because of long waits (46 percent) and the cost (47

Table 4.2 - Percentage of persons who consulted a health provider in the 4 weeks preceding the survey and were not satisfied, by reasons for dissatisfaction.

| | Percent dissatisfied | Reasons for dissatisfaction | | | | | | |
		Facilities not clean	Long wait	No trained professionals	Cost	No drugs available	Treatment unsuccessful	Other
Total	32.3	1.9	45.6	15.3	46.6	6.6	3.8	2.6
Cluster Location								
Accessible	32.2	2.5	49.1	20.8	43.8	9.3	3.4	2.0
Remote	32.4	1.2	41.8	9.2	49.7	3.7	4.2	3.3
Poverty Status								
Poor	24.0	0.0	55.8	3.2	49.3	2.8	0.0	0.8
Non-poor	35.2	2.4	42.8	18.3	46.2	7.6	4.7	3.0
Socio-economic Group								
Employee	7.9	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Self-employed - agriculture	34.1	1.8	45.5	13.5	47.8	7.4	4.3	2.9
Self-employed - other	27.1	0.0	49.4	43.6	40.6	0.0	0.0	0.0
Other	24.2	5.5	38.4	20.0	36.1	0.0	0.0	0.0
Gender								
Male	32.1	2.1	46.0	17.4	43.0	5.9	6.3	2.5
Female	32.5	1.7	45.3	13.4	49.7	7.3	1.6	2.7
Type of provider								
Public hospital	35.0	1.8	70.9	21.0	17.7	7.6	3.5	4.6
Private hospital	38.8	0.0	8.7	10.0	81.3	18.7	13.8	0.0
Religous hospital	51.6	3.0	41.3	23.7	75.9	15.8	0.0	0.0
Village health worker	20.4	36.0	0.0	64.0	0.0	0.0	0.0	0.0
Private Doctor/Dentist	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Pharmacist	27.0	0.0	5.7	1.1	88.9	0.0	4.3	0.0
Trad. Healer	5.9	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Other	32.9	100.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Karagwe DC

Base of Table is total population

percent).Unsuccessful treatment was reported as the reason for dissatisfaction at 4 percent, drug unavailability was cited as a reason at 7 percent and unavailability of trained professionals at 15 percent.

he analysis by cluster location shows similar trends from the overall rates where households from accessible villages reported long wait as the first reason for dissatisfaction (49 percent) and cost as the second reason (44 percent). Remote villages reported cost as the first reason for dissatisfaction (50 percent) and long wait as the second reason for dissatisfaction (42 percent).

The breakdown by poverty status shows similar dissatisfaction trends. Non-poor households reported cost as the lead reason for dissatisfaction at 46 percent, slightly lower than poor households (49 percent), while long wait was the lead reason for dissatisfaction among poor households at 56 percent, whereas non-poor households reported long wait as a reason for dissatisfaction by 43 percent.

Overall the non-poor reported a higher dissatisfaction rate at 35 percent compared to the poor who reported dissatisfaction at 24 percent. Households where the main income earner is self-employed in agriculture reported the highest dissatisfaction rate at 34 percent while employees reported the lowest dissatisfaction rate at 8 percent. Long wait was cited as the lead reason for dissatisfaction by employees (100 percent), self-employed in non agricultural activities (49 percent) and 'other' (38 percent). Cost was cited as the lead reason for dissatisfaction by self-employed in agriculture (48 percent). Number of trained professional was cited by self-employed in non-agricultural activities as the second reason for dissatisfaction (44 percent), 'other' reported it as the third reason for dissatisfaction (20 percent) as well as the self-employed in agriculture who cited the same reason in third place by 20 percent. Note that only the households where the main income earner is self-employed in agriculture cited drug unavailability (7 percent) or unsuccessful

Table 4.3: Percentage of persons who did not consult a health provider in the 4 weeks preceding the survey by the reasons for not consulting

	Percent not consulting	No need	Cost	Distance	No confidence	Other
		Reasons for not consulting				
Total	57.9	91.0	6.5	2.7	0.3	0.5
Cluster Location						
Accessible	54.8	95.5	2.9	0.9	0.4	0.5
Remote	61.0	87.0	9.5	4.2	0.2	0.4
Poverty Status						
Poor	59.9	86.6	9.5	3.5	0.3	0.6
Non-poor	56.9	92.6	5.3	2.4	0.2	0.4
Socio-economic Group						
Employee	77.0	97.9	1.2	0.9	0.0	0.0
Self-employed - agriculture	57.0	91.6	5.5	3.1	0.3	0.4
Self-employed - other	59.1	96.0	1.7	0.0	0.0	2.3
Other	56.5	73.1	26.9	1.3	0.0	0.0
Gender						
Male	60.3	90.5	6.6	3.3	0.2	0.3
Female	55.6	91.5	6.3	1.9	0.4	0.6
Type of sickness/injury						
Fever/malaria	9.9	32.6	55.0	15.8	1.5	0.4
Diarrhea/abdominal pains	13.7	14.1	60.3	35.2	0.0	0.0
Pain in back, limbs or joints	30.6	6.7	76.7	39.2	0.0	0.0
Coughing/breathing difficulty	17.2	45.1	43.5	14.1	0.0	3.1
Skin problems	30.3	21.3	52.0	0.0	26.7	0.0
Ear, nose, throat	18.2	42.9	57.1	31.3	0.0	0.0
Eye	22.1	17.1	82.9	0.0	0.0	0.0
Dental	49.8	0.0	88.1	11.9	0.0	0.0
Accident	42.1	27.2	72.8	0.0	0.0	0.0
Other	19.4	30.0	44.3	23.5	25.7	0.0

Source: CWIQ 2006 Karagwe DC

Base of Table is total population

treatment (4 percent) as a reason for dissatisfaction.

Breakdown by gender shows both male and females reported long wait as the reason for dissatisfaction by similar proportions (an average of 46 percent). Cost was cited by females as a reason for dissatisfaction at 50 percent, lower than males, at 43 percent. Unsuccessful treatment is reported higher by males at 6 percent than females at 1 percent. Similarly, lack of trained professionals was reported as a reason for dissatisfaction more by males at 17 percent than females at 13 percent.

Regarding health provider, the main cause of dissatisfaction in public hospitals is the long wait (71 percent), whereas in private hospitals the lead reason is cost (81 percent) similarly with religious hospitals (76 percent), private doctors and traditional healers (100 percent) and pharmacists (89 percent). Unclean facilities (36 percent) and number of trained professionals (64 percent) was pointed

out as a reason for dissatisfaction with village health workers. Lack of trained professionals was cited as a reason for dissatisfaction by 21 percent in public hospitals and 24 percent in religious hospitals.

4.3 Reasons for Not Consulting When Ill

The distribution of the population who did not consult a health provider in the four weeks preceding the survey is shown Table 4.3. The table shows that overall, 58 percent of the population did not consult a health provider, typically because there was no need (91 percent of the cases). However, 9 percent of the people who did not consult a health provider had other reasons, mainly the cost of healthcare.

The analysis of cluster location shows that households from accessible and remote villages found no need to consult a healthcare provider at rates of 96 and 87 percent respectively. Note that the remote villages cited cost as a reason by 10 percent.
Poverty status shows similar trends, with non-poor households reporting no need to

Table 4.4: Percentage of population sick or injured in the 4 weeks preceding the survey, and of those sick or injured the percentage by type of sickness/injury

	Sick or injured	Fever or malaria	Diarrhea/ abdominal pain	Pain in back, limbs or joints	Coughing/ breathing difficulty	Skin problem	Ear, nose, throat,	Eye	Dental	Accident	Other
Total	43.5	71.4	13.8	8.1	14.6	1.5	1.6	2.3	1.5	0.9	2.6
Male Total	41.5	68.5	13.8	7.8	14.7	2.0	1.4	3.1	1.3	1.7	2.6
0-4	58.6	79.1	15.6	0.6	15.5	1.7	1.7	0.0	0.9	0.0	3.5
5-9	44.1	83.3	11.1	1.1	6.0	1.7	0.0	4.9	0.0	0.0	0.0
10-14	32.5	79.0	9.9	1.3	11.3	0.0	0.0	1.5	1.4	0.0	3.8
15-29	26.3	65.3	11.3	5.8	19.4	1.9	5.3	0.0	2.2	3.7	4.1
30-49	37.2	56.9	8.5	7.7	22.2	1.2	0.0	3.1	1.2	7.9	1.9
50-64	45.9	31.7	30.8	49.4	16.2	0.0	0.0	6.1	1.2	0.0	5.2
65+	72.9	17.6	26.2	48.2	11.3	11.8	3.6	21.1	4.5	0.0	0.0
Female Total	45.5	74.0	13.8	8.4	14.5	1.0	1.8	1.7	1.8	0.1	2.5
0-4	58.9	80.3	12.9	0.0	28.1	0.6	1.0	1.0	0.0	0.4	0.0
5-9	39.8	81.1	10.1	6.1	7.3	4.2	0.0	0.7	0.7	0.0	3.6
10-14	34.8	81.6	11.5	2.1	4.2	2.3	5.7	0.0	0.0	0.0	3.9
15-29	37.7	75.3	14.1	5.2	9.3	0.0	2.9	1.6	2.5	0.0	4.6
30-49	46.3	71.7	13.0	14.2	10.4	0.3	1.1	2.4	3.4	0.0	2.4
50-64	62.4	51.4	22.2	20.1	19.2	0.0	0.0	3.1	2.4	0.0	3.4
65+	60.9	47.8	19.8	39.8	17.1	0.0	2.7	5.7	5.9	0.0	0.0

Source: CWIQ 2006 Karagwe DC

1. Percentage by type of sickness/injury may add to more than 100% because respondents may report multiple categories.

Base of Table is population sick (D4=1)

visit a healthcare provider at 93 percent and poor households at 87 percent. As expected, poor households reported cost (10 percent) as a reason for not consulting a healthcare provider while non-poor households reported half of that rate (5 percent).

Division by socio-economic groups shows 'no need' as a lead reason for not consulting a healthcare provider, where the households main income earner is an employee cited the highest percent at 98 percent, self-employed in agriculture at 92 percent, self-employed in other at 96 percent, and other at 73 percent. Cost was reported at 27 percent by 'other' and 5 percent by households headed by the self-employed in agriculture as a reason for not consulting a healthcare provider.

The gender breakdown shows similar rates of 'no need' (91 percent average), cost (6 percent) reported as reasons for not visiting a healthcare professional.
 Type of illness shows that for most infirmities, fever including malaria (55 percent), diarrhoea (60 percent) and pain (77 percent) the main cause for not consulting a health practitioner is cost. Distance was reported at a rate of 39 percent for pain in limbs or joints, 35 percent for abdominal pains and 33 percent for illnesses related to ear, nose or throat.

4.4   Type of Illness

Table 4.4 shows the percentage of population sick or injured in the 4 weeks

preceding the survey. Overall, fever or malaria is the most common sickness, affecting 71 percent of the ill population. In turn, coughing and breathing difficulties or diarrhoea and abdominal pain come in second and third place, with 15 and 14 percent of the population. Pain in back, joints or limbs affected 8 percent of the ill population, whereas other illnesses had minor shares.

The gender breakdown reveals that females make up a higher share of sick or injured population: 46 vs. 42 percent of males, but there are no dramatic differences by type of illness. The age breakdown shows that the share of sick/injured population starts at around 59 percent for children under 5 years old, decreases for the 5 to 9 cohort, stabilizes between 25 and 30 percent, and then starts increasing again for the 30-49 cohort, peaking for the population aged 65 and over for male (73 percent) and 50 to 64 group for female (62 percent). The share of ill population is highest among the under 15 cohorts, but as the shares affected by malaria reduces other problems emerge, mainly pain in back, limbs or joints.

4.5 Health Provider

Table 4.5 shows the percent distribution of health consultations in the 4 weeks preceding the survey. Overall, 52 percent of the consultations were made in a public hospital, 33 percent to a pharmacist or chemist, 6 percent in a religious hospital, and 4 percent to traditional healers and

Table 4.5: Percent distribution of health consultations in past 4 weeks by type of health provider consulted

	Public hospital	Private hospital	Religious hospital	Village health worker	Private doctor, dentist	Pharmacist, chemist	Traditional healer	Other	Total
Total	51.9	3.7	5.9	1.3	0.3	32.8	3.8	0.3	100.0
Cluster Location									
Accessible	56.3	3.1	7.7	1.1	0.3	29.2	2.1	0.4	100.0
Remote	47.0	4.5	4.0	1.5	0.3	36.7	5.8	0.2	100.0
Poverty Status									
Poor	58.0	3.7	2.2	0.9	0.0	30.1	5.1	0.0	100.0
Non-poor	49.6	3.7	7.3	1.4	0.4	33.8	3.4	0.4	100.0
Socio-economic Group									
Employee	47.2	3.0	3.0	9.8	0.0	33.9	3.0	0.0	100.0
Self-employed - agriculture	50.8	3.6	6.4	0.9	0.3	33.4	4.3	0.2	100.0
Self-employed - other	64.5	9.4	6.9	2.7	0.0	15.2	1.3	0.0	100.0
Other	55.4	0.0	1.2	1.3	0.0	39.8	0.8	1.5	100.0

Source: CWIQ 2006 Karagwe DC

Base of Table is population who consulted a health provider (D7=1)

private hospitals.

The breakdown by location shows no strong correlation with health provider, but households in accessible villages seem to go more often to public hospitals (56 percent) compared to households in remote villages (47 percent). In turn households in remote villages visit pharmacists and chemists at a higher rate (37 percent) versus households in accessible villages (29 percent).

Poor households consult public hospitals more often than non-poor households, with shares of 58 and 50 percent, respectively.

There are no clear trends when analysing the socio-economic group of the household.

4.6. Child Deliveries

Table 4.6 shows the percentage of women aged 12 to 49 who had a live birth in the year preceding the survey. Overall, 17 percent of women in this age-group gave birth in the past year. No girls aged 14 or under gave birth in the district. Around 6 percent of the females between 15 and 19 gave birth. The rate peaks at 32 percent for the 20-24 group, and then goes down, ending in 2 percent for the group aged 40 to 49. In addition, 95 percent of pregnant women received prenatal care.

The breakdown by cluster location shows no some distinct differences between remote and accessible villages. Women

from households in remote villages aged 15 to 19 reported more births at 10 percent versus 2 percent for their counterparts in accessible villages. Although women in remote villages reported more births consistently in the age-groups between 15 and 29 compared to their counterparts from accessible villages, they reported no births in the 40 and above age group while women from accessible villages reported a 5 percent birth rate.

The analysis by poverty status reveals that the share of 15-19 women from poor households having a live birth in the 12 months preceding the survey is almost twice as that (9 percent) of women from non-poor households (5 percent). Women from poor households consistently had more live births in the year preceding the survey than women from non-poor households. The share of women aged 40+ having live births in the year preceding the survey is 8 points higher in poor households.

The breakdown by socio-economic status shows that the highest rates of birth correspond to women from households where the main income earner is self-employed, with shares of 17 and 21 for 'self-employed agriculture' and 'self-employed other', respectively. Note that only 26 percent of women from the employee group received anti natal care.

Table 4.7 shows the percentage distribution of births in the five years preceding the survey. Roughly, 69 percent of births in the 5 years preceding the

Table 4.6: Percentage of women aged 12-49 who had a live birth in the year preceding the survey by age of the mother and the percentage of those births where the mother received pre-natal care

	12-14 yrs	15-19 yrs	20-24 yrs	25-29 yrs	30-39 yrs	40+ yrs	Total	Pre-natal care
Total	0.0	6.0	31.6	27.7	26.5	2.4	16.6	94.9
Cluster Location								
Accessible	0.0	1.9	30.0	23.3	18.7	4.7	13.7	100.0
Remote	0.0	9.8	33.0	33.0	34.4	0.0	19.5	91.5
Poverty Status								
Poor	0.0	9.0	43.1	39.2	46.9	9.2	27.6	95.4
Non-poor	0.0	5.1	28.2	23.1	18.1	0.5	13.0	94.6
Socio-economic Group								
Employee	0.0	0.0	15.2	44.1	15.2	0.0	10.5	26.2
Self-employed - agriculture	0.0	7.2	30.8	28.2	27.5	3.0	17.3	96.8
Self-employed - other	0.0	0.0	46.0	27.6	22.7	0.0	21.4	100.0
Other	0.0	0.0	42.0	0.0	26.4	0.0	9.3	100.0

Source: CWIQ 2006 Karagwe DC

Base of Table is Females 12+

Table 4.7: Percentage distribution of births in the five years preceding the survey by place of birth

	Hospital	Health centre	Dispensary	Health post	At home	Other	Total
Total	18.6	2.9	7.0	0.3	68.9	2.3	100.0
Cluster Location							
Accessible	23.8	1.2	9.6	0.0	63.3	2.1	100.0
Remote	14.1	4.3	4.8	0.5	73.7	2.5	100.0
Poverty Status							
Poor	11.4	2.6	6.0	0.0	76.7	3.3	100.0
Non-poor	22.5	3.0	7.6	0.5	64.6	1.8	100.0
Socio-economic Group							
Employee	9.2	0.0	9.2	0.0	81.7	0.0	100.0
Self-employed - agriculture	17.7	2.4	5.8	0.3	71.1	2.7	100.0
Self-employed - other	38.6	7.6	19.9	0.0	34.0	0.0	100.0
Other	14.6	6.1	11.1	0.0	68.2	0.0	100.0

Source: CWIQ 2006 Karagwe DC

Base of Table is total number of children under 5

Table 4.8: Percentage distribution of births in the five years preceding the survey by person who assisted in delivery of child

	Doctor	Nurse Midwife	T.T.B.A.	T.B.A.	Other Self	Don't know	Total	Delivery by health prof.
Total	1.4	27.6	13.5	29.8	27.3	0.5	100.0	42.5
Cluster Location								
Accessible	2.1	32.9	14.7	33.4	16.4	0.5	100.0	49.7
Remote	0.8	22.9	12.5	26.6	36.7	0.5	100.0	36.3
Poverty Status								
Poor	2.1	18.7	14.2	32.3	32.7	0.0	100.0	35.0
Non-poor	1.1	32.4	13.2	28.6	24.0	0.7	100.0	46.7
Socio-economic Group								
Employee	0.0	18.3	16.8	55.8	9.1	0.0	100.0	35.1
Self-employed - agriculture	1.7	24.8	15.1	30.1	27.7	0.5	100.0	41.6
Self-employed - other	0.0	66.0	0.0	15.8	18.2	0.0	100.0	66.0
Other	0.0	31.8	0.0	26.2	42.0	0.0	100.0	31.8

Source: CWIQ 2006 Karagwe DC

Base of Table is total number of children under 5

survey took place at home, 19 percent in a hospital, 7 percent in a dispensary and 3 percent in a health centre. The ordering remains across cluster location, poverty status, and socio-economic group of the household head.

Women from households in accessible villages had more births in hospitals (24 percent), than women from households in remote villages (14 percent). In turn, women from remote villages had more births at home (74 percent) compares to women in accessible villages (63 percent). Women from households in accessible villages had twice as many births at a dispensary than women from remote villages.

The breakdown by poverty status shows that women from non-poor households had twice as many deliveries conducted in hospitals than women from poor households (23 percent vs. 11 percent). Women from poor households had higher rates of deliveries conducted at home (77 percent) than women from non-poor households (65 percent).

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Table 4.9: Nutritional status indicators and program participation rates

	Nutritional status indicators			Program participation		
	Stunted	Wasted	Underweight	Nutrition	Weigh-in	Vaccinated
Total	35.9	2.5	19.7	48.1	97.9	93.6
Cluster Location						
Accessible	29.7	1.5	13.2	52.9	97.8	94.0
Remote	41.8	3.4	26.0	43.9	97.9	93.2
Poverty Status						
Poor	48.5	3.6	24.8	47.6	96.7	89.4
Non-poor	28.8	1.9	17.0	48.1	98.5	95.8
Socio-economic Group						
Employee	37.5	0.0	37.5	30.5	85.9	77.5
Self-employed - agriculture	37.2	2.5	19.7	50.1	98.0	93.7
Self-employed - other	16.3	5.1	10.4	35.1	100.0	95.0
Other	41.4	0.0	21.0	41.4	100.0	100.0
Gender and age in completed years						
Male	37.7	2.9	16.5	46.9	97.3	92.7
0	8.9	0.0	9.9	50.3	89.0	86.2
1	44.2	7.1	23.4	44.3	98.7	98.7
2	37.4	2.8	23.4	44.3	100.0	88.8
3	46.4	0.0	9.2	47.3	98.1	95.0
4	40.0	2.6	10.9	49.3	100.0	93.5
Female	33.6	2.0	23.8	49.5	98.5	94.7
0	17.2	2.0	21.0	57.5	98.5	100.0
1	36.3	5.2	26.1	43.8	100.0	97.7
2	36.8	0.0	34.9	39.4	97.1	94.4
3	29.4	0.0	16.8	55.5	100.0	98.1
4	42.7	2.6	17.7	52.3	96.1	78.4
Orphan status						
Orphaned	71.4	0.0	52.8	33.5	100.0	74.5
Not-orphaned	35.1	2.5	18.8	48.6	97.8	94.1
Foster status						
Fostered	23.7	0.0	0.0	36.1	100.0	100.0
Not-fostered	36.3	2.6	20.4	48.5	97.8	93.4

Source:CWIQ 2006 Karagwe DC

The split-up by socio-economic group shows that women from households where the main income earner is self-employed in other reported the highest rates of birth in hospitals at 37 percent, compared to women from households where the main income earner is self-employed in agriculture (18 percent), employee (9 percent) and other (15 percent). Births that took place at home were reported by 82 percent of women from households belonging to the 'employee' group, 71 percent for self-employed agriculture and 68 percent for other. The highest birth-rate attended in dispensaries was reported by women from households belonging to the 'self-employed other' category.

Table 4.8 shows the percentage distribution of births in the five years preceding the survey by person who assisted in the delivery of the child. Overall, 43 percent of births were attended by a health professional. Traditional birth assistants (TBA) and trained TBA accounted for 30 and 14 percent, 28 percent by midwives and doctors or nurses attended just 1 percent of the deliveries reported from the district.

The analysis by cluster location shows that TBA and Midwifes were more common in accessible villages than remote villages (33 percent), whereas in remote villages self-attended deliveries were more common at 37 percent followed by TBA at 27 percent.

As expected, women from non-poor households show a higher share of deliveries attended by a professional than women from poor households (47 percent

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vs. 35 percent). Women from poor households had more self-attended deliveries at 33 percent followed by TBA at 32 percent compared to women

From non-poor households who had more birth attended by midwives at 33 percent followed by TBA at 29 percent.

The breakdown by socio-economic group shows women from households belonging to the 'self-employed other' category report the highest share of deliveries attended by professionals: (66 percent), against 42, 35 and 32 of self-employed in agriculture, employee and other. Women from households where the main income earner is involved in 'other' activities reported the highest rate of self-attended child deliveries.

4.7 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).

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

Table 4.10: Percent Distribution of Children Vaccinated by Type of Vaccination Received

	Measles	BCG	DPT1	DPT2	DPT3	OPV0	OPV1	OPV2	OPV3	Vitamin A
Total	80.2	97.2	96.0	94.9	91.7	73.3	96.3	95.1	92.2	77.3
Cluster Location										
Accessible	81.6	96.8	95.9	94.7	93.4	78.7	95.9	95.4	94.3	81.9
Remote	79.0	97.5	96.1	95.0	90.1	68.6	96.7	94.8	90.4	73.1
Poverty Status										
Poor	75.6	97.0	95.8	94.9	90.5	72.3	95.8	94.6	90.9	70.8
Non-poor	82.8	97.2	96.1	94.8	92.2	74.3	96.6	95.3	92.9	81.1
Socio-economic Group										
Employee	77.3	91.6	91.6	91.6	83.2	91.6	91.6	91.6	83.2	74.8
Self-employed - agriculture	79.5	97.3	96.0	94.6	91.5	72.5	96.3	94.9	92.2	75.4
Self-employed - other	84.3	100.0	100.0	100.0	95.7	70.0	100.0	100.0	95.7	94.0
Other	90.0	94.2	94.2	94.2	94.2	81.0	94.2	94.2	94.2	90.0
Gender and age in completed years										
Male	80.3	96.6	95.4	94.4	91.7	72.7	96.0	94.8	92.5	77.5
0	10.1	85.2	78.0	72.8	61.1	62.8	81.0	75.9	64.1	27.1
1	96.0	100.0	100.0	100.0	98.0	73.6	100.0	100.0	99.5	83.7
2	98.4	100.0	100.0	100.0	100.0	79.0	100.0	100.0	100.0	98.4
3	94.1	98.8	100.0	100.0	100.0	73.1	100.0	98.8	98.8	87.9
4	97.8	97.8	97.8	97.8	97.8	74.2	97.8	97.8	97.8	87.8
Female	80.2	97.9	96.7	95.4	91.6	74.1	96.7	95.4	92.0	77.0
0	15.0	95.7	89.5	83.0	65.6	71.5	89.5	83.0	65.6	34.3
1	89.2	97.2	97.2	97.2	95.6	64.1	97.2	97.2	97.2	82.7
2	100.0	100.0	100.0	100.0	100.0	76.6	100.0	100.0	100.0	81.6
3	97.1	97.1	97.1	97.1	97.1	80.9	97.1	97.1	97.1	88.7
4	100.0	100.0	100.0	100.0	100.0	79.5	100.0	100.0	100.0	100.0

Source:CWIQ 2006 Karagwe DC

Base of table is total number of children under 5

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

Overall, 3 percent of all the children are wasted, and 36 percent are stunted. Almost half the children (48 percent) participate in nutrition programs.

Cluster location and poverty status are correlated with nutrition. Households in remote villages and accessible villages have similar rates of wasted children but children from households in remote villages have higher rates of stunted children than households in accessible villages, with rates of 30 and 42 percent, respectively. Similar differences are observed between poor and non-poor households. Poor households show 4 percent of wasted children and 49 percent of stunted children, whereas the figures for

Table 4.11: Percent Distribution of Children Vaccinated by Source of Information

	Health Card	Other	Total
Total	98.4	1.6	100.0
Cluster Location			
Accessible	99.1	0.9	100.0
Remote	97.8	2.2	100.0
Poverty Status			
Poor	97.5	2.5	100.0
Non-poor	98.8	1.2	100.0
Socio-economic Group			
Employee	100.0	0.0	100.0
Self-employed - agriculture	98.1	1.9	100.0
Self-employed - other	100.0	0.0	100.0
Other	100.0	0.0	100.0
Gender and age in completed years			
Male	98.6	1.4	100.0
0	91.6	8.4	100.0
1	100.0	0.0	100.0
2	100.0	0.0	100.0
3	100.0	0.0	100.0
4	100.0	0.0	100.0
Female	98.1	1.9	100.0
0	90.2	9.8	100.0
1	100.0	0.0	100.0
2	100.0	0.0	100.0
3	100.0	0.0	100.0
4	100.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

Base of table is total number of children under 5 vaccinated

non-poor households are 2 and 29 percent.

Regarding socio-economic status, households in the self-employed in non-agricultural activities category show the highest rates for wasted children, at 5 percent, whereas households from the category 'other' show the highest rate of stunted children, at 41 percent. Children from households where the main income earner is self-employed in non-agricultural activities show the lowest rates of stunted children at 16 percent.

The gender breakdown shows no difference in rates of wasted children, but shows higher share of stunted males than that of stunted females (38 against 34 percent, respectively).Table 4.10 shows the percent distribution of children vaccinated by type of vaccination received. Overall, 80 percent of children under 5 years old have vaccination against measles, 97 against BCG, and roughly between 94 and 88 percent received vaccinations against DPT and OPV. In addition, 77 percent of the children in the district receive vitamin A supplements. There are no differences by cluster location or poverty status. The breakdown by socio-economic group shows that vaccination rates in most cases are highest for children from the 'self-employed other' category and lowest for children from the 'employee' category.

The gender breakdown shows that females and male have similar vaccination shares. The age breakdown shows that the share of children consuming vitamin A increases with age. Finally, the vaccination rates for children under 1 are roughly 20 to 30 percent lower than for the rest of children.

Table 4.11 shows the percent distribution of children vaccinated by source of information. Overall, the information for 98 percent of the vaccinated children was supported by a vaccination card.

There is no difference by cluster location, poverty status or by socio-economic group. Furthermore, all children aged 1 and above had vaccination cards. Children between 0 and 11 months had vaccination cards in 92 and 90 percent of the cases, for males and females, respectively.

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5 EMPLOYMENT

This chapter examines employment indicators for the population of Karagwe DC. The first section analyses the employment status of the adult population. The second section of the chapter focuses on the working adults, with a special focus on the underemployed population. Trends examined include type of employment, employment sector and employer of the working adults. In the third section, the economically inactive subgroups of the adult population are examined. Next, household activities are studied. Analysis of child labour concludes this chapter.

5.1 Employment Status of Total Adult Population

The adult population of the district is categorised 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 underemployed. The underemployed are those individuals who report willingness to take on additional work. This category reflects the

population that is not working as much as they want, so they reflect surplus in the labour supply.

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 but were actively looking for a job.

Table 5.1 - Percentage distribution of the population by work status (age 15 and above)

	Working			Not working			Total
	Employed	Under emp.	Total	Unemploy.	Inactive	Total	
Total	65.6	26.7	92.3	0.3	7.4	7.7	100.0
Cluster Location							
Accessible	62.6	29.9	92.5	0.4	7.1	7.5	100.0
Remote	68.6	23.5	92.1	0.3	7.7	7.9	100.0
Poverty Status							
Poor	68.0	23.8	91.8	0.5	7.7	8.2	100.0
Non-poor	65.1	27.5	92.6	0.3	7.2	7.4	100.0
Gender and age							
Male	56.1	37.1	93.2	0.5	6.3	6.8	100.0
15-29	63.2	28.9	92.0	0.5	7.4	8.0	100.0
30-49	46.0	51.6	97.6	0.0	2.4	2.4	100.0
50-64	58.7	32.0	90.7	2.8	6.5	9.3	100.0
65+	62.8	17.4	80.2	0.0	19.8	19.8	100.0
Female	73.8	17.7	91.5	0.1	8.3	8.5	100.0
15-29	73.6	16.9	90.5	0.0	9.5	9.5	100.0
30-49	76.7	19.5	96.2	0.4	3.3	3.8	100.0
50-64	70.5	23.2	93.7	0.0	6.3	6.3	100.0
65+	67.1	7.6	74.7	0.0	25.3	25.3	100.0

Source:CWIQ 2006 Karagwe DC

1. Underemployed includes persons who sought to increase earnings in the seven days preceding the survey.

2. Unemployed includes persons who did not work in the four week period preceding the survey and who looked for work in the same period. The inactive population, primarily students and retired persons, is not included in unemployment.

5 Employment

Table 5.2 - Principal labour force indicators (persons age 15 and above)

	Total population			Heads of household		
	Active population	Unemployment rate	Underemploy-ment rate	Active population	Unemploy-ment rate	Underemploy-ment rate
Total	92.6	0.3	28.8	94.8	0.3	46.4
Cluster Location						
Accessible	92.9	0.4	32.2	95.6	0.0	52.0
Remote	92.3	0.3	25.4	94.0	0.7	40.8
Poverty Status						
Poor	92.3	0.5	25.8	94.1	0.0	40.8
Non-poor	92.8	0.3	29.6	94.9	0.4	47.8
Gender and age						
Male	93.7	0.6	39.6	96.1	0.4	48.8
15-29	92.6	0.6	31.2	99.0	0.0	56.5
30-49	97.6	0.0	52.8	97.6	0.0	53.1
50-64	93.5	3.0	34.2	95.4	3.1	33.0
65+	80.2	0.0	21.7	80.8	0.0	21.7
Female	91.7	0.2	19.3	89.2	0.0	34.9
15-29	90.5	0.0	18.7	100.0	0.0	79.7
30-49	96.7	0.4	20.2	91.2	0.0	46.8
50-64	93.7	0.0	24.7	100.0	0.0	26.9
65+	74.7	0.0	10.1	70.6	0.0	22.8

Source:CWIQ 2006 Karagwe DC

1. Underemployed includes persons who sought to increase earnings in the seven days preceding the survey.

2. Unemployed includes persons who did not work in the four week period preceding the survey and who
looked for work in the same period. The inactive population, primarily students and retired persons,
is not included.

Table 5.3 - Percentage distribution of the population by work status (age 15-24)

	Active population				Active		
	Employed	Under emp.	Working	Unemployed	Total	Inactive	Total
Total	77.2	11.8	89.0	0.4	89.4	10.6	100.0
Cluster Location							
Accessible	77.4	11.1	88.6	0.7	89.3	10.7	100.0
Remote	76.9	12.5	89.4	0.0	89.4	10.6	100.0
Poverty Status							
Poor	76.8	13.7	90.5	1.7	92.2	7.8	100.0
Non-poor	77.5	11.4	88.9	0.0	88.9	11.1	100.0
Gender and age							
Male	73.7	15.5	89.1	0.8	89.9	10.1	100.0
15-16	89.3	6.0	95.2	0.0	95.2	4.8	100.0
17-19	69.5	12.1	81.6	0.0	81.6	18.4	100.0
20-21	68.7	22.8	91.4	0.0	91.4	8.6	100.0
22-23	58.6	26.1	84.8	4.2	88.9	11.1	100.0
Female	80.1	8.8	88.9	0.0	88.9	11.1	100.0
15-16	94.1	0.0	94.1	0.0	94.1	5.9	100.0
17-19	73.4	9.0	82.4	0.0	82.4	17.6	100.0
20-21	78.3	13.9	92.2	0.0	92.2	7.8	100.0
22-23	73.5	15.1	88.6	0.0	88.6	11.4	100.0

Source:CWIQ 2006 Karagwe DC

1. Underemployed includes persons who sought to increase earnings in the seven days preceding the survey.

2. Unemployed includes persons who did not work in the four week period preceding the survey and who
looked for work in the same period. The inactive population, primarily students and retired persons,
is not included.

5.1.1 Work Status

Table 5.1 shows that roughly 2/3 of the adult population is employed and 27 percent underemployed. Unemployment is lower than 1 percent. This shows that underemployment is a bigger problem in the area than unemployment. Households in accessible villages show lower employment rates and higher underemployment than remote villages. In turn, poor households show higher employment and lower underemployment rates. For males, underemployment peaks for the cohort aged between 30 and 49 (52 percent). For females, in turn, it peaks in the 50-64 cohorts at 23 percent.

The adult population that was no working in the 4 weeks preceding the survey was mostly inactive, rather than unemployed. This means that most of them were students, sick people, etc. rather than people looking for work and ready for it. For the population under 65 years, inactivity fluctuates between 3 and 10 percent. For the population over 65 the number of inactive population goes up, as would be expected, reaching 25 percent for females and 30 percent for males.

5.1.2 Employment of Household Heads

Table 5.2 shows the principal labour force indicators for the adult population compared to the household heads. Activity rates are similar for total population and household heads, but underemployment is higher among the latter. Accessible and non-poor households have higher underemployment rates than their accessible and non-poor counterparts. The differences are larger for the household heads.

The gender breakdown shows that almost half the male household heads are underemployed, whereas the rate for all males is 40 percent. In turn, the rate for female household heads is higher than that for all females at 35 and 19 percent, respectively.
The breakdown by age-groups shows that almost 4 out of 5 female household heads aged between 15 and 29 are underemployed. There is a clear negative relationship between underemployment and age, the former reducing as the latter increases.

5.1.3 Youth Employment

Table 5.3 shows the distribution of the youth (ages 15 to 24) by work status. This group has lower rates of activity than the overall population, at 89 percent. In addition, underemployment is lower: only 12 percent is underemployed, as opposed to 27 percent for the overall population. There are no differences by cluster location, but the youth from poor households have higher activity rates than the youth from non-poor households.

A breakdown by gender shows that underemployment is higher among males than females, with rates of 16and 9 percent, respectively. By dividing the cohort into two groups, it can be seen that underemployment is higher in the 20-24 group, and much higher for males.

5.2 Working population

Table 5.4 shows that the vast majority of the working population is formed by self-employed (43 percent) or unpaid workers (49 percent). Moreover, employees only account for 8 percent of the working population. The self-employed population is somewhat higher in remote villages. In poor households, 4 percent of the underemployed has a position as an employee.
The gender breakdown shows that a

Table 5.4 - Percentage distribution of the working population by type of payment in main job

	Employee	Self-employed	Unpaid worker	Total
Total	7.6	43.4	48.9	100.0
Cluster Location				
Accessible	8.5	42.1	49.2	100.0
Remote	6.7	44.7	48.7	100.0
Poverty Status				
Poor	4.3	45.2	50.5	100.0
Non-poor	8.3	43.0	48.5	100.0
Gender and age				
Male	14.1	62.5	23.4	100.0
15-29	7.0	42.1	50.9	100.0
30-49	22.6	76.3	1.1	100.0
50-64	20.0	80.0	0.0	100.0
65+	0.0	93.5	6.5	100.0
Female	1.9	26.6	71.3	100.0
15-29	0.8	13.8	85.4	100.0
30-49	2.9	31.8	64.6	100.0
50-64	2.4	55.3	42.3	100.0
65+	3.3	46.0	50.7	100.0

Source:CWIQ 2006 Karagwe DC

Base is working population age 15+

higher share of males works as employees or is self-employed, whereas around 70 percent of females is unpaid. The breakdown by age-groups shows that the share of employees peaks for males in the 30-49 age-group, the self-employed for 65+ males and unpaid for 15-29 females.

The percentage distribution of the working population by employer is analysed in Table 5.5. The table shows that the private sector (formal or informal) employs almost half the working population, which combined with individuals who work for their own households represent up to 98 percent of the working population.

As would be expected, positions in State/NGO are more common in accessible villages and in non-poor households. Households employ higher shares of workers in poor households. There are no strong differences in the shares employed by the private sector.

The population working in the State/NGO peaks for males aged 50-64 at 7 percent; whereas 88 percent of young females (15-24) work for the household. In contrast, most men after 30 work for the private sector, whereas when they are aged between 15 and 29 half of them work for the household. Finally, the share of females working in the private sector increases gradually with age, but is

always lower than the respective shares of males.

Table 5.6 shows the percentage distribution of the working population by main activity. The categories are agriculture; mining, manufacturing, energy and construction; services (transport, trade, private and public services); domestic duties; and other. The most important result is that agriculture accounts for 81 percent of the working population. Domestic duties have the second highest share, at 13 percent.
The split-up by remoteness of the village and poverty status of the household shows that poor households and households from remote villages are more likely to be engaged in agriculture, whereas their counterparts have higher shares engaged in services and domestic duties.

The gender breakdown shows that the most common activities for females are agriculture and household duties, accounting for 97 percent of the working population. These are the main activities for men as well, but they are less concentrated, with 10 percent in other activities.

The breakdown by age-groups shows that younger cohorts have higher shares dedicated to household duties. Nearly 9 percent of males aged 30 to 49 works in services. The share of women in agriculture increases steadily with age until 64, and then reduces slightly, as household duties for this group increases.

Table 5.7 shows the percentage distribution of the working population by employment status, gender and activity. Around 75 percent of male employees work in services, with agriculture and mining, manufacturing, energy and construction in second and third place. Similarly, 78 percent of female employees are dedicated to services, and the remaining 22 percent to agriculture. The self-employed in non-agricultural activities work mostly in services (51 percent of males, 83 percent of females).

The 'other' group (unemployed, inactive, and domestic workers) is divided between agriculture and domestic duties, with other activities virtually at zero. Around 47 percent of males are dedicated to domestic duties and 54 are dedicated to agriculture. Similarly, the rates for

Table 5.5 - Percentage distribution of the working population by employer

	State/NGO/ Other	Private	Household	Total
Total	2.0	48.9	49.0	100.0
Cluster Location				
Accessible	3.2	48.7	48.1	100.0
Remote	0.9	49.2	50.0	100.0
Poverty Status				
Poor	0.0	48.4	51.6	100.0
Non-poor	2.3	49.3	48.4	100.0
Gender and age				
Male	3.0	73.9	23.1	100.0
15-29	0.0	50.0	50.0	100.0
30-49	5.8	93.0	1.2	100.0
50-64	7.2	92.8	0.0	100.0
65+	0.0	93.6	6.4	100.0
Female	1.2	26.9	71.9	100.0
15-29	0.8	11.6	87.6	100.0
30-49	2.3	33.5	64.3	100.0
50-64	0.0	60.7	39.3	100.0
65+	0.0	48.2	51.8	100.0

Source:CWIQ 2006 Karagwe DC

Base is working population age 15+

Table 5.6 - Percentage distribution of the working population by activity

	Agriculture	MMEC	Services	Domestic duties	Other	Total
Total	81.1	0.8	4.3	12.9	0.9	100.0
Cluster Location						
Accessible	76.3	1.6	6.8	14.6	0.8	100.0
Remote	85.9	0.1	1.8	11.1	1.1	100.0
Poverty Status						
Poor	90.8	0.0	0.0	8.2	1.0	100.0
Non-poor	78.7	1.1	5.2	14.0	0.9	100.0
Gender and age						
Male	79.1	1.8	6.3	10.8	2.0	100.0
15-29	68.9	2.0	4.4	23.0	1.7	100.0
30-49	85.8	2.2	9.1	1.1	1.8	100.0
50-64	87.0	0.0	7.2	0.0	5.8	100.0
65+	97.3	0.0	0.0	2.7	0.0	100.0
Female	82.8	0.0	2.5	14.7	0.0	100.0
15-29	72.9	0.0	3.0	24.1	0.0	100.0
30-49	92.7	0.0	3.0	4.3	0.0	100.0
50-64	95.4	0.0	0.0	4.6	0.0	100.0
65+	81.2	0.0	0.0	18.8	0.0	100.0

Source:CWIQ 2006 Karagwe DC

females are 20 percent (domestic duties) and 79 percent (agriculture).

The percentage distribution of the working population by employer, gender, and activity is depicted in Table 5.8. The working population employed by the government is mostly dedicated to services. The labour force working for private employers (whether formal or informal) is split between services and agriculture in the case of males, and mostly concentrated in services in the case of females. Individuals whose employer is the household mostly work in agriculture, with domestic duties in second place.

5.3 Underemployed Population

The percentage distribution of the underemployed population by employment status is shown in Table 5.9. Overall, 62 percent of the underemployed population is self-employed, 23 percent unpaid, and 15 percent has a position as an employee.

Remote and accessible villages do not show significant differences, but poverty seems to be correlated with the employment status of the underemployed. Non-poor households have a higher share of employees, whereas poor households show a higher share of self-unpaid workers.

The gender breakdown reveals that underemployed females are almost equally split between self-employed and unpaid (with rates of 40 and 57 percent, respectively), whereas underemployed males are mostly concentrated on the self-employed category, with a share of almost 75 percent.

For the underemployed females, the share of self-employment increases with age, and the share in the unpaid category decreases with age. For males, the 'employee' category increases with age, but are mostly self-employed. Furthermore, only the 15-29 cohorts have a share occupied as unpaid workers.

Table 5.10 shows the percentage distribution of the underemployed population by employer. Overall, the underemployed population mostly works for a private employer, and in second place in household. Around 3 percent of the underemployed population works for the government or NGO.

Accessible villages report higher shares of underemployed population employed by State/NGO/Other and household and lower shares employed by a private employer.

5 Employment

Around 76 percent of the underemployed population in non-poor household's works for a private employer and 22 percent work in the household, compared to 71 and 29 percent, respectively, for the underemployed population in poor households.

The gender breakdown reveals that the underemployed males are vastly concentrated in private employers. In turn, underemployed females are split, with 57 percent working for a private agent and 41 percent dedicated to household duties.

The age-group analysis shows that virtually all underemployed males aged 30 to 49 are in the private sector; whereas 20 percent of the 50-64 groups work for the government or an NGO. The share of underemployed population working in the household is highest for young females at 72 percent. Inside the male group, only the 15-29 cohort works in the household, with a share of 12 percent. Sum of underemployed males work mostly for private agents and sum work in small group for the government or an NGO. Females are split between private and household: for the groups 50 or over, underemployed females are more likely to work for a private agent, but for the group between 15 and 29 years old the main

employer is the household.

The percentage distribution of the underemployed population by main economic activity is presented in Table 5.11. The most outstanding conclusion is that 90 percent of underemployed workers are dedicated to agriculture.

In remote villages, 91 percent of the underemployed population works in agriculture. In accessible villages, the share of unemployed population in agriculture is somewhat lower, 89 percent. Services take the second place, with 10 percent of the underemployed population in accessible villages.

The breakdown by poverty status shows that poor households have higher shares in agriculture than non-poor households, who in contrast are relatively more likely to be in the 'services' category whereas the former are more likely to undertake domestic duties.

The gender breakdown shows that after agriculture, the second most important activity is the service sector, but men have a higher share (10 percent) than women (4 percent). The analysis of age-groups also shows that the share of males in public services increases with age. Furthermore, underemployed males work in the

Table 5.7 - Percentage distribution of the working population by employment status, sex and activity

	Employee		Self-employed Agriculture		Self-employed Other		Other		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	14.8	22.2	100.0	100.0	0.0	0.0	53.5	79.3	78.8	82.7
Mining & non-primary	9.9	0.0	0.0	0.0	19.5	0.0	0.0	0.0	1.7	0.0
Services	75.3	77.8	0.0	0.0	50.8	83.4	0.0	0.7	6.1	2.4
Domestic duties	0.0	0.0	0.0	0.0	0.0	16.6	46.5	20.0	11.2	14.9
Other	0.0	0.0	0.0	0.0	29.7	0.0	0.0	0.0	2.1	0.0

Source:CWIQ 2006 Karagwe DC

Base is working population age 15+

Table 5.8 - Percentage distribution of the working population by employer, sex and activity

	Government/NGO		Private		Household		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	0.0	0.0	56.4	0.0	81.0	83.7	79.1	82.8
Mining & non-primary	7.8	0.0	0.0	0.0	1.6	0.0	1.8	0.0
Services	92.2	100.0	43.6	100.0	4.2	1.5	6.3	2.5
Domestic duties	0.0	0.0	0.0	0.0	11.1	14.8	10.8	14.7
Other	0.0	0.0	0.0	0.0	2.1	0.0	2.0	0.0

Source:CWIQ 2006 Karagwe DC

Base is the working population age 15+

household only in the young cohort (15 to 29).

5.4 Unemployed and Inactive Population

Unemployment refers to a person who is actively looking for a job and is ready to work. If the individual is not working but is not looking for a job or is not ready to work, he or she is part of the inactive population. For instance, a full-time student, an ill individual or a retired person are not unemployed, because they either are not looking for a job (the student and the retired), or are not able to work (the ill person). Table 5.12 shows the main causes for unemployment. In the whole sample only 0.3 percent of the adult population is unemployed, resulting in a sample size too small to draw solid statistical conclusions. However, the only reasons cited for unemployment were infirmity and 'other'.

Table 5.13 shows the main causes of economic inactivity. Overall, infirmity is the main reason for inactivity, affecting almost half of the inactive population (52 percent). The categories 'student', 'too old' and 'retired' together explain most of the remaining share.

Infirmity is higher in remote villages than in accessible ones (61 and 42 percent, respectively). In turn, being too old or being a student are more important in accessible than in remote villages. In non-poor households, being a student or being retired are more important causes of inactivity than in poor households. Infirmity is more important in non-poor household.

There are no remarkable gender differences. The breakdown by age-groups shows that infirmity occurs across the whole inactive population. The second most important cause ('student') is absolutely concentrated in the 15-29 age-groups.

5.5   Household Tasks

Table 5.14 shows the activities normally undertaken in the household by its members. First the population aged 15 and above is analysed. The most common activities for the population aged 15 and above are taking care of the sick, elderly,

and children. All the activities are undertaken by more than 50 percent of the members.

In accessible villages, toilet cleaning, cooking, and taking care of elderly and sick are undertaken by a higher share of the population than in remote villages. The rest of activities are undertaken by

Table 5.9 - Percentage distribution of the underemployed population by employment status

	Regular employee	Unpaid worker	Self-employed	Total
Total	15.2	23.1	61.7	100.0
Cluster Location				
Accessible	15.1	24.6	60.3	100.0
Remote	15.3	21.3	63.5	100.0
Poverty Status				
Poor	10.3	29.1	60.6	100.0
Non-poor	15.5	21.8	62.6	100.0
Gender and age				
Male	21.7	4.3	74.0	100.0
15-29	13.6	12.2	74.2	100.0
30-49	25.5	0.0	74.5	100.0
50-64	40.0	0.0	60.0	100.0
65+	0.0	0.0	100.0	100.0
Female	3.3	57.3	39.4	100.0
15-29	0.0	73.8	26.2	100.0
30-49	5.4	47.5	47.1	100.0
50-64	9.7	42.7	47.7	100.0
65+	0.0	0.0	100.0	100.0

Source:CWIQ 2006 Karagwe DC

Base is the underemployed population age 15+

Table 5.10 - Percentage distribution of the underemployed population by employer

	State/NGO/Other	Private	Household	Total
Total	3.2	74.0	22.9	100.0
Cluster Location				
Accessible	4.5	71.7	23.8	100.0
Remote	1.5	76.8	21.6	100.0
Poverty Status				
Poor	0.0	70.9	29.1	100.0
Non-poor	3.0	75.5	21.5	100.0
Gender and age				
Male	3.8	91.9	4.3	100.0
15-29	0.0	87.8	12.2	100.0
30-49	3.9	96.1	0.0	100.0
50-64	20.4	79.6	0.0	100.0
65+	0.0	100.0	0.0	100.0
Female	2.0	41.4	56.6	100.0
15-29	0.0	27.7	72.3	100.0
30-49	5.4	47.1	47.5	100.0
50-64	0.0	57.3	42.7	100.0
65+	0.0	100.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

Base is working population age 15+

Table 5.11 - Percentage distribution of the underemployed population by activity

	Agriculture	f/ energy/constr	private services	Domestic duties	Other	Total
Total	89.5	1.0	8.2	1.4	0.0	100.0
Cluster Location						
Accessible	88.5	1.7	9.8	0.0	0.0	100.0
Remote	90.8	0.0	6.1	3.1	0.0	100.0
Poverty Status						
Poor	95.4	0.0	0.0	4.6	0.0	100.0
Non-poor	89.0	1.2	9.2	0.6	0.0	100.0
Gender and age						
Male	87.5	1.5	10.3	0.7	0.0	100.0
15-29	85.2	3.0	9.8	2.0	0.0	100.0
30-49	89.5	0.8	9.7	0.0	0.0	100.0
50-64	79.6	0.0	20.4	0.0	0.0	100.0
65+	100.0	0.0	0.0	0.0	0.0	100.0
Female	93.2	0.0	4.2	2.6	0.0	100.0
15-29	96.8	0.0	3.2	0.0	0.0	100.0
30-49	89.3	0.0	7.3	3.4	0.0	100.0
50-64	90.3	0.0	0.0	9.7	0.0	100.0
65+	100.0	0.0	0.0	0.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

Base is the underemployed population age 15+

similar shares of the population in both types of village.

The breakdown by poverty status shows that fetching water and taking care of children are more common in poor households, whereas cleaning the toilet is a more common activity in non-poor households. There are no wide differences in the remaining activities.

The most important differences are shown in the gender and age-breakdown. Females have higher shares undertaking each activity than males. The analysis of age-groups shows that the shares generally decrease with age in all activities.

5.6 Child Labour

Table 5.15 shows that the most common activities for children between 5 and 14 years old are fetching water, firewood, and taking care of the sick and elderly. It is interesting to notice that the shares for children fetching water or firewood are higher than for the rest of the population. Children from accessible villages are more likely to undertake most of the activities than children from remote villages. Similar differences are observed in the breakdown by poverty status.

Almost all males fetch firewood and water. Females have lower rates in fetching firewood, and higher rates in fetching water and the other tasks. The analysis by age-groups shows that the 10-14 cohorts have higher rates than the youngest children, for all household tasks.

The breakdown by orphan status shows no differences in the share of children fetching water, but higher shares of orphaned children fetching firewood and cooking. Non-orphaned children report higher shares undertaking the rest of household activities.

The breakdown by foster status shows that fostered children are more likely to clean the toilet and cook, whereas non-fostered children are more likely to fetch water and take care of children.

The main descriptive statistics for child labour are presented in Table 5.16. Roughly half the children are economically active. Their main economic activity is mostly household duties (89 percent), and in second place agriculture (11 percent). The share of working children is higher in accessible clusters and non-poor households. Working children from accessible households report a share of 95 percent working in the household, and 5 percent in agriculture. The rates for working

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Table 5.12 - Percentage distribution of the unemployed population by reason

	No work available	Seasonal inactivity	Student	HH/Family duties	Age: too old	Age: too young	Infirmity	Retired	Other	Total
Total	0.0	0.0	0.0	0.0	0.0	0.0	40.2	0.0	59.8	100.0
Cluster Location										
Accessible	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
Remote	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0
Poverty Status										
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	62.1	0.0	37.9	100.0
Gender and age										
Male	0.0	0.0	0.0	0.0	0.0	0.0	53.3	0.0	46.7	100.0
15-29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0
65+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
15-29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source:CWIQ 2006 Karagwe DC

Base is the unemployed population age 15+

Table 5.13 - Percentage distribution of the economically inactive population by reason

	No work available	Seasonal inactivity	Student	HH/Family duties	Age: too old	Age: too young	Infirmity	Retired	Other	Total
Total	0.0	0.0	25.5	0.0	11.1	0.0	52.1	1.0	10.3	100.0
Cluster Location										
Accessible	0.0	0.0	33.5	0.0	14.1	0.0	42.3	2.1	8.0	100.0
Remote	0.0	0.0	18.6	0.0	8.5	0.0	60.6	0.0	12.2	100.0
Poverty Status										
Poor	0.0	0.0	15.4	0.0	2.4	0.0	69.6	0.0	12.6	100.0
Non-poor	0.0	0.0	28.7	0.0	13.9	0.0	46.6	1.3	9.5	100.0
Gender and age										
Male	0.0	0.0	28.9	0.0	5.0	0.0	52.3	0.0	13.9	100.0
15-29	0.0	0.0	54.2	0.0	0.0	0.0	33.7	0.0	12.1	100.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	48.8	0.0	51.2	100.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0
65+	0.0	0.0	0.0	0.0	22.6	0.0	77.4	0.0	0.0	100.0
Female	0.0	0.0	23.2	0.0	15.3	0.0	52.0	1.7	7.8	100.0
15-29	0.0	0.0	42.3	0.0	0.0	0.0	43.5	0.0	14.2	100.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	88.3	11.7	0.0	100.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0
65+	0.0	0.0	0.0	0.0	67.4	0.0	32.6	0.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

Base is the inactive population age 15+

children from remote villages are 83 and 17 percent, respectively. There are no remarkable differences by poverty status or gender.

The main difference is given by the age breakdown. The almost all working children between 5 and 9 years old work in the household, with rates of 98 and 99 percent for boys and girls, respectively. The 10-14 groups, despite still having household duties as their main economic activity, have an increasing presence in agriculture, with 16 and 22 percent.

5 Employment

Table 5.14 - Activities normally undertaken in the household (age 15 and over)

	Fetching water	Fetching firewood	Cleaning toilet	Cooking	Care of children	Care or elderly/sick
Total	67.9	68.7	53.0	62.5	77.8	92.9
Cluster Location						
Accessible	67.2	69.3	60.4	64.5	78.2	94.2
Remote	68.7	68.2	45.7	60.4	77.4	91.7
Poverty Status						
Poor	72.7	69.9	46.9	61.8	88.0	92.4
Non-poor	66.7	68.5	54.6	62.6	75.3	93.0
Gender and age						
Male	54.4	59.2	31.5	24.7	70.1	91.5
15-29	79.6	74.0	42.5	35.6	63.7	90.1
30-49	38.3	54.7	24.9	15.0	80.1	97.2
50-64	27.2	37.4	20.7	18.3	68.6	94.9
65+	18.5	18.7	12.0	16.6	58.5	64.8
Female	79.6	77.0	71.8	95.2	84.5	94.2
15-29	93.4	91.1	80.7	96.6	84.1	98.2
30-49	79.8	73.2	72.6	99.2	94.0	98.4
50-64	58.2	58.0	60.2	93.4	78.6	86.5
65+	22.7	32.3	29.1	71.9	53.8	61.8

Source:CWIQ 2006 Karagwe DC

Table 5.15 - Activities normally undertaken in the household (age 5 to 14)

	Fetching water	Fetching firewood	Cleaning toilet	Cooking	Care of children	Care or elderly/sick
Total	90.7	74.4	46.9	49.3	70.2	68.5
Cluster Location						
Accessible	92.8	74.3	56.5	53.6	72.1	75.1
Remote	88.5	74.5	37.4	45.0	68.3	62.0
Poverty Status						
Poor	88.5	74.9	44.1	44.9	75.7	68.2
Non-poor	91.5	74.0	47.3	50.9	68.4	68.2
Gender and age						
Male	89.4	75.7	43.8	38.8	65.7	66.0
5-9	81.0	59.1	32.7	24.1	60.5	51.1
10-14	96.2	89.3	52.9	50.8	69.9	78.1
Female	92.1	72.9	50.2	60.9	75.2	71.3
5-9	85.8	53.8	33.3	34.4	70.6	52.4
10-14	97.6	89.9	65.2	84.3	79.2	88.1
Orphan status						
Orphaned	91.6	78.1	33.4	54.7	59.0	64.2
Not-orphaned	90.7	74.0	49.0	48.5	72.0	69.3
Foster status						
Fostered	87.1	74.6	56.5	53.2	44.0	70.3
Not-fostered	91.2	74.0	46.4	48.8	72.9	69.1

Source:CWIQ 2006 Karagwe DC

Virtually all the children work in the household, with counted exceptions working for a private employer.

The breakdown by orphan and foster status shows stark differences. Orphaned children are more likely to be working than non-orphaned children, at rates of 83 and 49 percent, respectively. In turn, fostered children are more likely to be working than non-fostered children, but the difference is somewhat lower (75 and 49 percent). Orphaned children are more likely to work in agriculture than non-orphaned children, whereas non-orphaned

children are more likely to work in household duties.

Table 5.16 - Child labour (age 5 to 14)

| | Working | Main activity | | | Employer | |
		Agriculture	Household	Other	Private	Household
Total	51.3	11.0	89.0	0.0	0.1	99.9
Cluster Location						
Accessible	54.1	5.4	94.6	0.0	0.3	99.7
Remote	48.7	16.7	83.3	0.0	0.0	100.0
Poverty Status						
Poor	49.3	12.0	88.0	0.0	0.0	100.0
Non-poor	51.9	10.7	89.3	0.0	0.2	99.8
Gender and age						
Male	51.3	9.6	90.4	0.0	0.0	100.0
5-9	31.3	1.8	98.2	0.0	0.0	100.0
10-14	98.0	15.5	84.5	0.0	0.0	100.0
Female	51.3	12.4	87.6	0.0	0.3	99.7
5-9	33.2	1.5	98.5	0.0	0.6	99.4
10-14	95.7	21.7	78.3	0.0	0.0	100.0
Orphan status						
Orphaned	82.5	18.8	81.2	0.0	0.0	100.0
Not-orphaned	48.7	9.8	90.2	0.0	0.2	99.8
Foster status						
Fostered	74.9	2.8	97.2	0.0	0.0	100.0
Not-fostered	48.6	11.3	88.7	0.0	0.2	99.8

Source:CWIQ 2006 Karagwe DC

5 Employment

6 PERCEPTIONS ON WELFARE AN CHANGES WITHIN COMMUNITIES

This chapter presents the perceptions on welfare status and changes in Karagwe DC. The first section shows perceptions of changes in the economic situation both of the communities and of the households. Section two summarises self-reported difficulties in satisfying a set of household needs. In section three asset ownership and occupancy status, as well as occupancy documentation are analysed. Section four gives information related to agriculture: use of agricultural inputs, landholding, and cattle ownership. Section five shows perceptions of crime and security in the community. Section six shows the main income contributor to the household. A brief analysis of ownership of selected household items concludes the chapter.

6.1 Economic Situation

The analysis of this section is based solely on the perception of the interviewees. The main respondent for this part of the questionnaire was the household head. In cases where the household head was not able to respond i.e. was travelling, sick or had little information on the household's daily practices, then the best-informed household member responded. The respondents were asked to comment on whether the situation had changed for the better/worse or remained the same compared to the year prior the survey.

6.1.1 Perception of Change in the Economic Situation of the Community

Table 6.1 shows the percent distribution of households by the perception of the economic situation of the community compared to the year before the survey. Results show that 30 percent of all households in the district reported a positive change in the economic situation of their community. About the same percentage (29 percent) of the population reported observing no changes in their

Table 6.1: Percent distribution of households by the perception of the economic situation of the community compared to the year before the survey

	Much Worse	Worse	Same	Better	Much Better	Don't Know	Total
Total	7.2	31.5	29.3	28.7	0.6	2.8	100.0
Cluster Location							
Accessible	3.5	35.6	30.1	26.7	0.6	3.6	100.0
Remote	10.8	27.5	28.5	30.7	0.6	1.9	100.0
Poverty Status							
Poor	5.8	27.4	35.1	28.1	1.5	2.1	100.0
Non-poor	7.6	32.7	27.6	28.8	0.4	3.0	100.0
Household size							
1-2	7.9	34.4	24.4	27.2	0.0	6.1	100.0
3-4	6.2	28.6	33.9	27.6	0.0	3.8	100.0
5-6	7.1	28.0	30.7	31.3	1.7	1.2	100.0
7+	8.1	38.1	24.6	27.6	0.2	1.4	100.0
Area of land owned by the household							
None	19.3	28.8	35.2	6.8	0.0	9.9	100.0
< 1 ha	7.3	26.5	34.2	28.7	0.0	3.3	100.0
1-1.99 ha	3.6	33.4	37.4	23.5	0.0	2.1	100.0
2-3.99 ha	7.7	31.0	28.2	29.9	0.8	2.3	100.0
4-5.99 ha	5.8	30.8	20.9	34.8	1.8	5.9	100.0
6+ ha	12.3	33.2	17.7	36.2	0.5	0.0	100.0
Type of livestock owned by the household							
None	9.8	29.8	32.5	24.7	0.7	2.6	100.0
Small only	3.5	32.7	26.7	34.2	0.0	2.9	100.0
Large only	6.1	28.2	28.2	24.5	5.5	7.5	100.0
Both	9.8	35.7	25.4	27.4	0.6	1.1	100.0
Socio-economic Group							
Employee	7.2	26.5	50.6	11.1	0.0	4.7	100.0
Self-employed - agriculture	7.6	31.7	28.0	29.7	0.4	2.6	100.0
Self-employed - other	4.2	29.0	35.4	27.9	3.5	0.0	100.0
Other	4.8	33.5	28.2	26.4	0.0	7.2	100.0
Gender of the head of household							
Male	7.3	31.7	28.5	29.2	0.7	2.6	100.0
Female	6.5	30.8	32.4	26.7	0.0	3.6	100.0
Marital status of the head of household							
Single	37.8	24.4	4.6	33.2	0.0	0.0	100.0
Monogamous	5.5	29.8	30.4	31.0	0.1	3.2	100.0
Polygamous	6.6	35.3	21.4	32.0	1.9	2.9	100.0
Loose union	13.2	30.0	35.8	16.9	4.1	0.0	100.0
Widow/div/sep	6.3	34.8	31.1	24.8	0.0	3.0	100.0
Education level of the head of household							
None	9.8	28.1	32.5	24.5	0.9	4.2	100.0
Primary	4.9	32.3	28.2	32.6	0.1	1.9	100.0
Secondary +	19.6	45.4	20.6	5.6	5.1	3.7	100.0

Source: CWIQ 2006 Ngara DC

community's economic situation. Even though the majority reported the community economic condition to be worse (39 percent) only 7 percent reported the situation to be much worse.

Looking at the overall economic situation by household characteristics, there seems to be no strong correlation between cluster location of the household and the perception of change in the community's economic situation. However, poverty status of the household seems to be correlated with the perceived economic change, as there is a difference of 8 percentages between the non-poor and poor who reported worse conditions in their community's economic situation, at 41 and 33 percent respectively.

While 37 percent of households owning six or more hectares report better economic situation of their community, the share for households owning no land is only 7 percent. Similarly, the percentage of households owning small livestock who report better economic situation of their community is higher than that of those households owning no livestock at all, at 34 and 26 percent respectively. On the other hand, about 30 percent of households whose main income earner is self-employed in either agriculture or non-agricultural activities report better economic conditions in their communities compared to only 11 percent of households where the main income earner is an employee.

The breakdown by gender of the household head does not show strong differences. However, responses on the change in economic situation of the community show correlation with the education level of the household head. While 65 percent of household heads who have done secondary education have report worse economic conditions in their communities, only about 38 percent of household heads with primary or no education report worse economic conditions in their communities. Likewise, a larger percentage (62 percent) of single household heads report worse economic conditions in their communities compared to 36 percent of the monogamous households.

6.1.2 Perception of Change in the Economic Situation of the Household

Table 6.2 shows the percent distribution of households by the perception of their economic situation compared to the year before the survey. About a third (33 percent) reported better economic conditions, while only 23 percent reported same conditions compared to the year preceding the survey.

While nearly a half (49 percent) of those living in remote clusters reported economic deterioration of the household, the share for accessible clusters was 39 percent. The same pattern is observed between the poor and non-poor households. Poor households are more likely to express negative views on their economic condition than non-poor households, with a difference of 5 percentage points.

The percentage of households reporting much worse conditions is higher for smaller households. Likewise, 33 percent of households owning no land report much worse economic conditions of their households compared to only 7 percent of households owning six or more hectares of land. Furthermore, while half (50 percent) the households owning no livestock report worse economic conditions of their households, the share of households owning small livestock and those owning large livestock is only 37 percent.

The percentage of households belonging to the 'other' socio-economic group who report worse economic conditions of their households is significantly higher than that of employees, at 55 and 7 percent respectively. Similarly, 66 percent of households where the head is single report deterioration in their households' economic conditions compared to 38 percent of monogamous and polygamous households.

Furthermore, 35 percent of male-headed households report better economic conditions of their households compared to 19 percent of female-headed households. Likewise, while 49 percent of household heads who have secondary education or more report better economic conditions of their households, the share

Table 6.2: Percent distribution of households by the perception of the economic situation of the household compared to the year before the survey

	Much Worse	Worse	Same	Better	Much Better	Don't Know	Total
Total	12.0	32.1	23.3	30.7	1.9	0.0	100.0
Cluster Location							
Accessible	10.1	29.4	26.4	30.9	3.2	0.0	100.0
Remote	13.9	34.7	20.3	30.5	0.6	0.0	100.0
Poverty Status							
Poor	14.8	32.6	28.6	24.0	0.0	0.0	100.0
Non-poor	11.4	32.1	21.7	32.3	2.4	0.0	100.0
Household size							
1-2	22.6	30.7	19.2	27.5	0.0	0.0	100.0
3-4	10.2	31.3	24.4	32.5	1.6	0.0	100.0
5-6	12.1	26.9	27.4	31.1	2.5	0.0	100.0
7+	7.6	41.0	19.1	29.6	2.7	0.0	100.0
Area of land owned by the household							
None	32.5	22.5	28.2	16.8	0.0	0.0	100.0
< 1 ha	19.1	28.3	26.7	22.6	3.3	0.0	100.0
1-1.99 ha	13.9	30.1	29.1	26.9	0.0	0.0	100.0
2-3.99 ha	9.1	32.6	23.3	34.3	0.7	0.0	100.0
4-5.99 ha	12.7	39.0	15.6	26.6	6.1	0.0	100.0
6+ ha	7.1	32.3	14.3	40.6	5.7	0.0	100.0
Type of livestock owned by the household							
None	18.7	31.0	27.6	22.6	0.0	0.0	100.0
Small only	6.3	30.7	20.4	41.4	1.3	0.0	100.0
Large only	0.0	37.3	23.0	27.6	12.1	0.0	100.0
Both	8.8	40.1	15.5	26.8	8.8	0.0	100.0
Socio-economic Group							
Employee	0.0	7.2	26.8	58.2	7.8	0.0	100.0
Self-employed - agriculture	11.7	34.4	21.9	30.9	1.1	0.0	100.0
Self-employed - other	11.2	17.6	32.6	31.6	7.0	0.0	100.0
Other	24.0	30.5	30.5	10.6	4.4	0.0	100.0
Gender of the head of household							
Male	10.3	31.7	22.2	33.4	2.4	0.0	100.0
Female	19.2	33.6	28.0	19.1	0.0	0.0	100.0
Marital status of the head of household							
Single	16.6	48.5	4.6	30.2	0.0	0.0	100.0
Monogamous	6.7	31.1	20.3	39.4	2.5	0.0	100.0
Polygamous	7.4	30.6	22.1	35.7	4.2	0.0	100.0
Loose union	29.5	32.4	35.1	3.0	0.0	0.0	100.0
Widow/div/sep	21.1	33.4	29.4	16.1	0.0	0.0	100.0
Education level of the head of household							
None	16.1	30.7	25.7	27.5	0.0	0.0	100.0
Primary	10.1	32.9	23.0	31.8	2.3	0.0	100.0
Secondary +	9.2	31.5	9.7	38.4	11.2	0.0	100.0

Source: CWIQ 2006 Ngara DC

for household heads with no education is only 28 percent.

6.2 Self-reported Difficulties in Satisfying Household Needs

This section analyses the difficulties households faced in satisfying household needs during the year preceding the survey. The selected needs are food, school fees, house rent, utility bills and healthcare. For each household, the respondent was asked to say whether they never, seldom, often or always experience difficulties in satisfying the specified household need.

**Table 6.3: Percent distribution of households by the difficulty in satisfying the
food needs of the household during the year before the survey**

	Never	Seldom	Often	Always	Total
Total	12.7	42.1	36.4	8.8	100.0
Cluster Location					
Accessible	17.8	42.9	32.3	7.0	100.0
Remote	7.7	41.3	40.5	10.5	100.0
Poverty Status					
Poor	5.5	37.5	42.8	14.2	100.0
Non-poor	14.3	43.3	35.0	7.4	100.0
Household size					
1-2	10.2	45.4	35.9	8.5	100.0
3-4	14.6	38.6	39.4	7.4	100.0
5-6	11.7	43.4	32.7	12.2	100.0
7+	13.3	42.8	37.9	6.1	100.0
Area of land owned by the household					
None	0.0	0.0	56.7	43.3	100.0
< 1 ha	8.4	42.8	43.5	5.2	100.0
1-1.99 ha	9.6	36.9	42.1	11.4	100.0
2-3.99 ha	11.6	50.3	31.3	6.8	100.0
4-5.99 ha	21.8	31.3	38.2	8.7	100.0
6+ ha	20.2	49.1	28.7	2.1	100.0
Type of livestock owned by the household					
None	7.6	40.7	40.6	11.1	100.0
Small only	13.2	45.0	32.8	9.0	100.0
Large only	35.0	32.1	33.0	0.0	100.0
Both	24.7	41.2	33.1	1.0	100.0
Socio-economic Group					
Employee	30.3	52.9	16.8	0.0	100.0
Self-employed - agriculture	11.0	43.7	35.7	9.6	100.0
Self-employed - other	34.3	29.1	36.6	0.0	100.0
Other	3.1	28.0	57.3	11.6	100.0
Gender of the head of household					
Male	13.4	45.2	33.5	7.9	100.0
Female	9.9	29.0	48.6	12.5	100.0
Marital status of the head of household					
Single	4.6	67.5	27.9	0.0	100.0
Monogamous	14.3	44.7	31.6	9.4	100.0
Polygamous	8.3	52.6	32.9	6.2	100.0
Loose union	20.9	34.0	42.7	2.4	100.0
Widow/div/sep	9.4	30.5	48.7	11.5	100.0
Education level of the head of household					
None	8.0	39.7	41.7	10.6	100.0
Primary	14.4	42.8	34.4	8.4	100.0
Secondary +	25.0	49.7	25.3	0.0	100.0

Source: CWIQ 2006 Ngara DC

6.2.1 Food Needs

Table 6.3 shows the percent distribution of households by the difficulty in satisfying the food needs of the household during the year before the survey. Overall, more than a half (55 percent) of the district's households never/seldom experience food shortages while the remaining population experience food shortages frequently (often/ always).

People living in remote clusters report difficulties satisfying food needs more often than people living in accessible clusters. While more than a half (52 percent) of the people living in remote clusters experience food shortages frequently (often/always), 39 percent of those living in accessible clusters report frequent problems satisfying food needs. Likewise, 57 percent of poor households experienced food shortages frequently compared to only 42 percent of non-poor households.

Table 6.4: Percent distribution of households by the difficulty in paying school fees during the year before the survey

	Never	Seldom	Often	Always	Total
Total	91.0	5.8	2.7	0.5	100.0
Cluster Location					
Accessible	88.9	7.8	2.7	0.6	100.0
Remote	93.1	3.8	2.8	0.4	100.0
Poverty Status					
Poor	89.4	4.1	6.0	0.5	100.0
Non-poor	91.4	6.3	1.9	0.5	100.0
Household size					
1-2	99.3	0.0	0.0	0.7	100.0
3-4	96.5	2.0	1.5	0.0	100.0
5-6	90.1	7.6	1.1	1.2	100.0
7+	79.9	11.9	8.3	0.0	100.0
Area of land owned by the household					
None	100.0	0.0	0.0	0.0	100.0
< 1 ha	96.7	3.3	0.0	0.0	100.0
1-1.99 ha	98.6	0.8	0.6	0.0	100.0
2-3.99 ha	88.1	7.6	4.1	0.3	100.0
4-5.99 ha	89.0	5.4	2.6	3.0	100.0
6+ ha	78.8	15.3	5.9	0.0	100.0
Type of livestock owned by the household					
None	94.3	3.6	2.1	0.0	100.0
Small only	93.3	4.1	2.4	0.3	100.0
Large only	66.1	26.5	4.8	2.6	100.0
Both	77.5	14.0	5.8	2.7	100.0
Socio-economic Group					
Employee	81.4	18.6	0.0	0.0	100.0
Self-employed - agriculture	91.0	5.3	3.2	0.6	100.0
Self-employed - other	93.0	7.0	0.0	0.0	100.0
Other	94.1	4.3	1.6	0.0	100.0
Gender of the head of household					
Male	90.8	6.2	2.5	0.5	100.0
Female	91.7	4.0	3.8	0.6	100.0
Marital status of the head of household					
Single	83.9	0.0	12.0	4.1	100.0
Monogamous	91.6	6.1	1.7	0.5	100.0
Polygamous	86.9	9.1	4.0	0.0	100.0
Loose union	88.5	7.9	3.7	0.0	100.0
Widow/div/sep	93.1	3.3	3.2	0.5	100.0
Education level of the head of household					
None	92.9	3.0	3.5	0.6	100.0
Primary	90.9	6.6	2.1	0.4	100.0
Secondary +	79.0	14.8	6.1	0.0	100.0

Source: CWIQ 2006 Ngara DC

Furthermore, while all (100 percent) of households owning no land reported frequent problems satisfying food needs, only 31 percent of households owning six or more hectares of land experience food shortages frequently. There is also a positive correlation between livestock ownership and satisfying food needs. The percentage rate of people don't own livestock who frequently (often/always) experience food shortage are higher than those with some livestock (small, large or both). While 35 percent of households owning large livestock did not experience food shortages, only 8 percent of households with no livestock and 13 percent of households with small livestock reported absence of food shortages in the year preceding the survey.

The socio-economic group of the household also shows some correlation

Table 6.5: Percent distribution of households by the difficulty in paying house rent during the year before the survey

	Never	Seldom	Often	Always	Total
Total	99.1	0.4	0.5	0.0	100.0
Cluster Location					
Accessible	98.5	0.5	1.0	0.0	100.0
Remote	99.6	0.4	0.0	0.0	100.0
Poverty Status					
Poor	100.0	0.0	0.0	0.0	100.0
Non-poor	98.8	0.5	0.6	0.0	100.0
Household size					
1-2	98.1	0.0	1.9	0.0	100.0
3-4	100.0	0.0	0.0	0.0	100.0
5-6	97.9	1.4	0.7	0.0	100.0
7+	100.0	0.0	0.0	0.0	100.0
Area of land owned by the household					
None	90.7	0.0	9.3	0.0	100.0
< 1 ha	100.0	0.0	0.0	0.0	100.0
1-1.99 ha	98.4	0.7	0.8	0.0	100.0
2-3.99 ha	100.0	0.0	0.0	0.0	100.0
4-5.99 ha	100.0	0.0	0.0	0.0	100.0
6+ ha	97.9	2.1	0.0	0.0	100.0
Type of livestock owned by the household					
None	98.5	0.4	1.1	0.0	100.0
Small only	100.0	0.0	0.0	0.0	100.0
Large only	94.5	5.5	0.0	0.0	100.0
Both	100.0	0.0	0.0	0.0	100.0
Socio-economic Group					
Employee	100.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	99.8	0.2	0.0	0.0	100.0
Self-employed - other	93.0	3.5	3.5	0.0	100.0
Other	95.6	0.0	4.4	0.0	100.0
Gender of the head of household					
Male	99.2	0.5	0.3	0.0	100.0
Female	98.6	0.0	1.4	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	98.8	0.8	0.4	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	98.8	0.0	1.2	0.0	100.0
Education level of the head of household					
None	100.0	0.0	0.0	0.0	100.0
Primary	98.5	0.7	0.8	0.0	100.0
Secondary +	100.0	0.0	0.0	0.0	100.0

Source: CWIQ 2006 Ngara DC

with the household's ability to satisfy its food needs. The breakdown by socio-economic group shows that employees tend to have lower shares of households with frequent problems to satisfy food needs than households belonging to the other socio-economic groups, as 83 percent experienced problems satisfying needs less frequently (never/seldom). Furthermore, the majority (69 percent) of households belonging to the 'other' socio-

economic group (unemployed, inactive, involved in domestic work) reported having frequent problems satisfying food needs (often/always).

The breakdown by marital status of the household head shows that single household heads report having less food shortages than household heads of the other groups, as 73 percent of them never/seldom experience food shortages. Likewise, only a quarter (25 percent) of households where the household head has secondary education or more report frequent food shortages (often/always) compared to more than half (53 percent) the households whose head has no education. Similarly, the percentage of female-headed households who report frequent food shortages is higher than that of male-headed households at 62 and 42 percent respectively.

6.2.2 Paying School Fees

Table 6.4 shows the percentage distribution of households by the difficulty in paying school fees during the year before the survey. At the time of the survey, 91 percent of the households in the district reported that they never had problems paying school fees and only 4 percent of the households reported that they often/always had problems paying school fees. It is worth noting that children in primary state schools do not pay fees. While children in secondary state schools do pay fees, secondary school enrolment rates are very low (for more details, see chapter 3).

Poverty status, gender, education level and cluster location do not show strong correlation with the ability to pay school fees. However, it is observed that while almost all (99 percent) of the people living in households with one or two members have never had problems paying school fees, the share for households with seven or more members is 80 percent.

While 79 percent of households owning 6 or more hectares of land never have problems with paying school fees, virtually all (100 percent) households owning no land claim they never have problems paying fees. Similarly, the percentage of households owning no livestock who reported they never have problems with paying school fees is significantly higher than that of those owning large livestock at 94 and 66

Table 6.6: Percent distribution of households by the difficulty in paying utility bills during the year before the survey

	Never	Seldom	Often	Always	Total
Total	100.0	0.0	0.0	0.0	100.0
Cluster Location					
Accessible	100.0	0.0	0.0	0.0	100.0
Remote	100.0	0.0	0.0	0.0	100.0
Poverty Status					
Poor	100.0	0.0	0.0	0.0	100.0
Non-poor	100.0	0.0	0.0	0.0	100.0
Household size					
1-2	100.0	0.0	0.0	0.0	100.0
3-4	100.0	0.0	0.0	0.0	100.0
5-6	100.0	0.0	0.0	0.0	100.0
7+	100.0	0.0	0.0	0.0	100.0
Area of land owned by the household					
None	100.0	0.0	0.0	0.0	100.0
< 1 ha	100.0	0.0	0.0	0.0	100.0
1-1.99 ha	100.0	0.0	0.0	0.0	100.0
2-3.99 ha	100.0	0.0	0.0	0.0	100.0
4-5.99 ha	100.0	0.0	0.0	0.0	100.0
6+ ha	100.0	0.0	0.0	0.0	100.0
Type of livestock owned by the household					
None	100.0	0.0	0.0	0.0	100.0
Small only	100.0	0.0	0.0	0.0	100.0
Large only	100.0	0.0	0.0	0.0	100.0
Both	100.0	0.0	0.0	0.0	100.0
Socio-economic Group					
Employee	100.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	100.0	0.0	0.0	0.0	100.0
Self-employed - other	100.0	0.0	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	100.0	0.0	0.0	0.0	100.0
Female	100.0	0.0	0.0	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	100.0	0.0	0.0	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	100.0	0.0	0.0	0.0	100.0
Education level of the head of household					
None	100.0	0.0	0.0	0.0	100.0
Primary	100.0	0.0	0.0	0.0	100.0
Secondary +	100.0	0.0	0.0	0.0	100.0

Source: CWIQ 2006 Ngara DC

percent respectively. Likewise, while 94 percent of households whose head belongs to the 'other' socio-economic group never have problems with paying school fees, the share for households headed by employees is 81 percent.

Furthermore, over 90 percent of households where the head is monogamous or widowed/divorced/separated had never had problems paying school fees compared to 82 percent of households whose head is single.

6.2.3 Paying House Rent

Table 6.5 shows the percent distribution of households by the difficulty in paying house rent during the year before the survey. Nearly all (99 percent) households in the district report that never having problems paying house rent. Nonetheless, a small percentage (9 percent) of households owning no land at all and 4 percent of households belonging to the 'other' socio-economic group report that

Table 6.7: Percent distribution of households by the difficulty in paying for health care during the year before the survey

	Never	Seldom	Often	Always	Total
Total	43.5	31.3	18.4	6.8	100.0
Cluster Location					
Accessible	44.4	36.2	17.3	2.2	100.0
Remote	42.6	26.5	19.5	11.4	100.0
Poverty Status					
Poor	31.4	28.7	30.1	9.7	100.0
Non-poor	46.3	32.2	15.4	6.1	100.0
Household size					
1-2	51.4	17.5	24.3	6.8	100.0
3-4	44.5	32.6	15.1	7.8	100.0
5-6	39.2	37.9	16.6	6.3	100.0
7+	42.9	29.4	21.4	6.3	100.0
Area of land owned by the household					
None	14.9	29.4	22.5	33.2	100.0
< 1 ha	48.5	26.4	16.5	8.5	100.0
1-1.99 ha	38.3	35.0	20.2	6.6	100.0
2-3.99 ha	45.5	31.5	17.9	5.1	100.0
4-5.99 ha	50.2	25.8	18.3	5.8	100.0
6+ ha	46.3	31.5	15.8	6.5	100.0
Type of livestock owned by the household					
None	39.9	33.0	18.7	8.4	100.0
Small only	41.7	32.1	21.7	4.4	100.0
Large only	54.3	34.9	3.3	7.5	100.0
Both	62.1	19.0	10.3	8.5	100.0
Socio-economic Group					
Employee	62.6	26.4	11.1	0.0	100.0
Self-employed - agriculture	42.2	31.8	19.3	6.7	100.0
Self-employed - other	46.2	46.2	7.6	0.0	100.0
Other	47.7	11.7	21.6	19.1	100.0
Gender of the head of household					
Male	41.2	32.6	19.7	6.4	100.0
Female	52.8	25.8	13.0	8.3	100.0
Marital status of the head of household					
Single	40.0	23.6	36.4	0.0	100.0
Monogamous	40.3	31.8	20.7	7.3	100.0
Polygamous	39.6	34.2	18.8	7.4	100.0
Loose union	44.9	39.6	11.4	4.1	100.0
Widow/div/sep	52.9	27.0	13.2	6.9	100.0
Education level of the head of household					
None	40.6	28.7	20.0	10.7	100.0
Primary	44.0	33.2	17.5	5.2	100.0
Secondary +	56.9	24.0	19.1	0.0	100.0

Source: CWIQ 2006 Ngara DC

they often have problems paying house rent. It is also observed that only 6 percent of households owning large animals report that they seldom have problems paying house rent. The rest of the selected household characteristics such as poverty status, cluster location, household size, gender, marital status and education level do not show strong correlation with the ability to pay house rent.

6.2.4 Paying utility Bills

Table 6.6 shows the percent distribution of households by the difficulty in paying utility bills during the year before the survey. The outcome on household's ability to pay utility bills is similar to paying house rent. All households in the district report that they never have problems with paying utility bills irrespective of the selected household characteristics such as poverty status, cluster location, household size, livestock ownership, land ownership, socio-economic group, gender, marital status and educational level.

6.2.5 Paying for Healthcare

Table 6.7 shows the percent distribution of households by the difficulty in paying for healthcare during the year before the survey. Three quarters (75 percent) of the households interviewed at the time of the survey stated that they never/seldom have problems paying for healthcare. While 80 percent of the households located in accessible clusters never/seldom experience problems paying for healthcare, the share for households located in remote clusters is 70 percent. Similarly, 78 percent of non-poor households never/seldom experience problems paying for healthcare compared to 60 percent of poor households.

Most households (78 percent) that own large acreages of land (six or more) report that they never/seldom experienced difficulties paying for healthcare, while only 44 percent of households owning no land report that they never/seldom have problems paying for healthcare. Similarly, the majority (89 percent) of households owning large livestock never/seldom experience problems paying for healthcare compared to 74 percent of households owning small livestock and 73 percent of households owning no livestock at all. It is households belonging to the 'employee' socio-economic group never have problems paying for healthcare compared to only 42 percent of households belonging to the self-employed in agriculture.

While more than a half (53 percent) of female-headed households never had problems paying for healthcare, the share

for male-headed households is 41 percent. Similarly, 53 percent of households where the household head is widowed/divorced/separated never experienced problems paying for healthcare compared to 40 percent of households where the head is monogamous, polygamous or single. Furthermore, while 31 percent of households where the head has no education often/always experience problems paying for healthcare, only 19 percent of households where the head has acquired secondary education or more report similar conditions.

6.3   Assets and Household Occupancy Status

This section discusses ownership of selected assets and household occupancy status. The selected assets are houses, land, livestock, vehicles, motorcycles, bicycles and wheelbarrows. This section will also provide detailed information on asset ownership by household characteristics. Household occupancy status describes the type of arrangement the household has in terms of their current dwelling. Respondents were asked whether they own, rent, live free or temporarily live in their current dwelling,

and if they held any documentation to support the occupancy status. Besides the respondent's testimony, no further methods were used to verify this information.

6.3.1 Asset Ownership

Table 6.8 shows the percent distribution of households owning a selected group of assets. Overall, 92 percent of the district's households own their dwellings while 97 percent owns some land. 40 percent of households own small livestock, while only 4 percent owns large livestock. While more than a quarter (26 percent) of household own a bicycle, only 4 percent owns motorcycle and less than 1percent owns a car.

Table 6.9 shows the percent distribution of households by occupancy status. Proportions of households owning these assets are about the same independent of their cluster location. However, the percentage of poor households owning their dwellings is higher than that of non-poor households at 95 and 91 percent respectively. Disaggregation of the data shows that 99 percent of households with seven or more members own their dwellings compared to 77 percent of households with one or two members. Similarly, 96 percent of households

Table 6.8: Percentage of households owning certain assets

	Home	Land	Livestock			Vehicle	Motor-cycle	Bicycle	Wheel-barrow
			Small	Large	Both				
Total	91.5	97.0	39.5	4.1	10.3	0.4	3.7	25.9	0.7
Cluster Location									
Accessible	91.7	97.4	35.6	3.9	11.7	0.8	5.4	31.0	1.4
Remote	91.4	96.7	43.3	4.4	9.0	0.0	2.1	20.9	0.0
Poverty Status									
Poor	94.8	96.2	36.0	1.7	6.7	0.0	1.3	8.7	0.0
Non-poor	90.6	97.3	40.4	4.8	11.3	0.5	4.4	30.0	0.9
Household size									
1-2	77.1	92.2	23.1	4.2	3.3	0.0	0.0	9.4	0.0
3-4	88.6	97.2	44.8	5.6	6.4	0.0	3.0	26.5	0.0
5-6	95.8	97.5	39.8	3.0	10.1	1.3	4.3	26.3	0.5
7+	98.9	99.3	42.7	3.7	20.1	0.0	6.1	35.0	2.2
Socio-economic Group									
Employee	71.5	92.2	15.5	15.0	31.8	5.1	21.8	56.1	0.0
Self-employed - agric	92.9	97.5	41.1	3.8	8.3	0.0	2.4	24.4	0.2
Self-employed - other	81.3	95.8	33.0	7.0	14.4	3.5	12.0	45.9	7.6
Other	95.6	95.6	38.3	0.0	21.3	0.0	3.1	8.9	0.0
Gender of the head of household									
Male	91.0	97.9	41.6	4.7	12.1	0.5	4.4	29.3	0.8
Female	93.8	93.6	30.6	1.7	2.6	0.0	1.0	11.9	0.0

Source: CWIQ 2006 Ngara DC

belonging to the 'other' socio-economic group own their dwellings compared to 72 percent of employees. However, while over a half (56 percent) of households whose main income earner is an employee owns a bicycle and over a fifth (22 percent) owns a motorcycle, only 9

percent of households belonging to the 'other' socio-economic group owns a bicycle and 3 percent owns a motorcycle. Likewise, 29 percent of male-headed households own a bicycle compared to 12 percent of female-headed households.

6.3.2 Occupancy Documentation

The percent distribution of households by type of occupancy documentation is shown in Table 6.10. Most residents in the district have no documentation to verify their occupancy status. Only 4 percent of the households possess formal occupancy documentation, which include a title, deed, renting contract or payment receipt. 71 percent of households in this district have no documentation at all.

6.4 Agriculture

The analysis in this section focuses on the distribution of households by use of certain agricultural inputs, land ownership and cattle ownership.

6.4.1 Agricultural Inputs

The survey collected information on agricultural practices. Data was gathered on usage of farm inputs and the main source from which the farmers got the inputs. Table 6.11 shows the percent distribution of households using certain inputs. This information is complemented by Table 6.12, which shows the main source of agricultural inputs.

Nearly a third (30 percent) of farmers applies agricultural inputs to their farms and the majority (97 percent) of those who use farm inputs apply fertilizers. The percentage of households with seven or more members who use farm inputs is significantly higher than that of households with one or two members at 47 and 12 percent respectively. Likewise, use of agricultural inputs in male-headed households is higher than that of female-headed households at 32 and 21 percent respectively. Furthermore, the percentage of households from the self-employed in non-agricultural activities using agricultural inputs is 15 percentage points higher than that of households whose head belongs to the 'other' socio-economic group.

Most households that use agricultural inputs obtain them by preparing them

Table 6.9: Percent distribution of households by occupancy status

	Own	Rent	Free	Other	Total
Total	91.5	2.9	3.6	1.9	100.0
Cluster Location					
Accessible	91.7	2.4	5.5	0.4	100.0
Remote	91.4	3.5	1.8	3.3	100.0
Poverty Status					
Poor	94.8	1.4	1.3	2.4	100.0
Non-poor	90.6	3.4	4.2	1.8	100.0
Household size					
1-2	77.1	8.7	6.2	8.0	100.0
3-4	88.6	2.3	7.4	1.7	100.0
5-6	95.8	3.0	0.9	0.3	100.0
7+	98.9	0.0	0.7	0.4	100.0
Socio-economic Group					
Employee	71.5	0.0	28.5	0.0	100.0
Self-employed - agriculture	92.9	2.4	2.4	2.3	100.0
Self-employed - other	81.3	9.7	9.0	0.0	100.0
Other	95.6	4.4	0.0	0.0	100.0
Gender of the head of household					
Male	91.0	3.3	3.3	2.4	100.0
Female	93.8	1.4	4.7	0.0	100.0

Source: CWIQ 2006 Ngara DC

Base for percentage is all households

Table 6.10: Percent distribution of households by type of occupancy documentation

	Title deed	Renting contract	Payment receipt	Other document	No document	Total	Secure tenure
Total	0.6	1.4	1.8	25.4	70.8	100.0	3.8
Cluster Location							
Accessible	1.2	1.3	1.0	23.7	72.8	100.0	3.5
Remote	0.0	1.5	2.6	27.2	68.7	100.0	4.1
Poverty Status							
Poor	0.0	1.4	2.4	25.6	70.6	100.0	3.8
Non-poor	0.8	1.4	1.7	25.5	70.6	100.0	3.8
Household size							
1-2	0.0	3.1	2.7	11.8	82.4	100.0	5.8
3-4	0.7	1.5	1.8	25.2	70.8	100.0	4.0
5-6	1.2	1.4	1.5	29.1	66.6	100.0	4.2
7+	0.0	0.0	1.7	29.4	68.9	100.0	1.7
Socio-economic Group							
Employee	0.0	0.0	0.0	22.1	77.9	100.0	0.0
Self-employed - agric	0.2	0.9	1.8	25.8	71.2	100.0	2.9
Self-employed - other	7.0	9.7	4.2	18.9	60.1	100.0	20.9
Other	0.0	0.0	0.0	28.7	71.3	100.0	0.0
Gender of the head of household							
Male	0.8	1.7	1.8	27.7	68.0	100.0	4.3
Female	0.0	0.0	1.7	16.0	82.3	100.0	1.7

Source: CWIQ 2006 Ngara DC

Base for percentage is all households

Table 6.11: Percentage of households using agricultural inputs and
and the percentage using certain inputs

	% of hhs using	Fertilizer	Improved seedling	Fingerlings	Hooks and nets	Insecticides	Other
Total	29.8	96.6	3.9	1.0	0.0	0.8	0.9
Cluster Location							
Accessible	31.1	95.3	5.6	0.0	0.0	1.5	1.8
Remote	28.5	98.0	2.0	2.0	0.0	0.0	0.0
Poverty Status							
Poor	28.5	96.2	3.8	5.0	0.0	0.0	0.0
Non-poor	30.3	96.7	3.9	0.0	0.0	0.9	1.1
Household size							
1-2	11.6	82.9	17.1	0.0	0.0	0.0	0.0
3-4	27.3	97.3	7.7	0.0	0.0	2.7	0.0
5-6	28.1	100.0	0.0	0.0	0.0	0.0	0.0
7+	46.7	95.4	2.1	2.7	0.0	0.0	2.5
Socio-economic Group							
Employee	25.4	100.0	25.4	0.0	0.0	25.4	0.0
Self-employed - agriculture	30.3	96.9	2.8	1.2	0.0	0.0	1.1
Self-employed - other	35.0	90.0	10.0	0.0	0.0	0.0	0.0
Other	20.0	100.0	0.0	0.0	0.0	0.0	0.0
Gender of the head of household							
Male	31.9	96.0	4.5	1.1	0.0	0.9	1.1
Female	21.0	100.0	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Ngara DC

Base for percentage for cols 2-7 is all households using agricultural inputs

Table 6.12: Percentage distribution of households using agricultural inputs
by the main source of the inputs

	Open market	Government	Donor agency	Cooperatives	Other	Total
Total	5.8	0.8	0.0	0.0	93.4	100.0
Cluster Location						
Accessible	5.5	1.5	0.0	0.0	93.0	100.0
Remote	6.1	0.0	0.0	0.0	93.9	100.0
Poverty Status						
Poor	9.3	0.0	0.0	0.0	90.7	100.0
Non-poor	5.0	1.0	0.0	0.0	94.1	100.0
Household size						
1-2	17.1	0.0	0.0	0.0	82.9	100.0
3-4	11.2	0.0	0.0	0.0	88.8	100.0
5-6	0.0	0.0	0.0	0.0	100.0	100.0
7+	4.5	2.2	0.0	0.0	93.3	100.0
Socio-economic Group						
Employee	25.4	0.0	0.0	0.0	74.6	100.0
Self-employed - agric	5.9	0.0	0.0	0.0	94.1	100.0
Self-employed - other	0.0	10.0	0.0	0.0	90.0	100.0
Other	0.0	0.0	0.0	0.0	100.0	100.0
Gender of the head of household						
Male	6.7	0.9	0.0	0.0	92.4	100.0
Female	0.0	0.0	0.0	0.0	100.0	100.0

Source: CWIQ 2006 Ngara DC

Base for percentage is all households

themselves (93 percent) and only 6 percent purchase them at an open market. 1 percent of the households get their inputs from government and none report donor agencies or cooperatives as their main source. The percentage of

households with one or two members who purchase agricultural inputs at an open market is higher than that of households with seven or more members at 17 and 5 percent respectively. Furthermore, a quarter (25 percent) of households belonging to the 'employee' socio-economic group purchase their agricultural inputs in an open market compared to 6 percent of households from the 'self-employed – agriculture' group. The share for the other socio-economic groups is virtually null. Likewise, the percentage of male-headed households who purchase their agricultural inputs in an open market is 7 percentage points higher than that of female-headed households.

6.4.2 Landholding

Table 6.13 shows the distribution of households by the area of land owned. About 38 percent of all households owns less than two acres of land (including 3 percent of landless households), 39 percent owns between 2 and 4 acres, and 24 percent owns 4 or more acres.

Larger households seem to own larger landholdings than households with less members. While 44 percent of households with seven or more members own 4 or more acres of land, only 7 percent of households with one or two members own 4 or more acres of land. Similarly, 40 percent of households whose main income earner is an employee owns 4 or more acres of land compared to 19 percent of households belonging to the 'other' socio-economic group.

Finally, male-headed households have larger land holdings than households headed by females.

6.4.2 Cattle Ownership

Table 6.14 shows the percent distribution of households by the number of cattle owned. 86 percent of households own no cattle at all, and only 2 percent own more than 10 heads of cattle. Households in remote villages are more likely to own no cattle as well as poor households. The breakdown by household size shows that households with one or two members are more likely to own no cattle compared to households with seven or more members at 93 and 76 percent respectively.
35 percent of households from the 'employee' groups owns some cattle (between 2 and 10 heads) compared to only 7 percent of the households belonging to the 'self-employed – agriculture' group. Finally, male-headed households, on average, own more cattle than female-headed households.

Table 6.13: Percent distribution of households by the area (in ha) of land owned by the household

	None	< 1 ha	1-1.99	2-3.99	4-5.99	6+ ha	Total
Total	3.0	6.8	27.5	39.1	12.7	10.9	100.0
Cluster Location							
Accessible	2.6	7.7	25.4	39.2	13.0	12.2	100.0
Remote	3.3	6.0	29.6	39.0	12.4	9.7	100.0
Poverty Status							
Poor	3.8	3.0	37.1	43.8	9.4	2.8	100.0
Non-poor	2.7	7.9	25.2	37.5	13.6	13.1	100.0
Household size							
1-2	7.8	21.2	40.9	24.1	3.5	2.5	100.0
3-4	2.8	8.2	34.6	39.0	6.0	9.4	100.0
5-6	2.5	3.1	24.6	45.3	17.2	7.3	100.0
7+	0.7	0.9	13.7	40.4	21.0	23.2	100.0
Socio-economic Group							
Employee	7.8	0.0	10.2	42.6	9.6	29.8	100.0
Self-employed - agriculture	2.5	6.5	29.0	39.0	12.1	10.8	100.0
Self-employed - other	4.2	13.0	22.0	33.4	20.3	7.0	100.0
Other	4.4	8.5	23.4	44.4	13.4	5.8	100.0
Gender of the head of household							
Male	2.1	5.8	26.6	39.7	14.0	11.9	100.0
Female	6.4	11.3	31.5	36.8	7.2	7.0	100.0

Source: CWIQ 2006 Ngara DC

Base for percentage is all households

Table 6.14: Percent distribution of households by the number of cattle owned by the household

	None	1	2-10	11-20	21-50	50+	Total
Total	85.6	2.8	9.0	1.1	1.1	0.3	100.0
Cluster Location							
Accessible	84.4	2.2	9.9	1.6	1.3	0.6	100.0
Remote	86.7	3.5	8.1	0.7	1.0	0.0	100.0
Poverty Status							
Poor	91.7	2.6	5.2	0.5	0.0	0.0	100.0
Non-poor	83.9	2.9	10.0	1.3	1.4	0.4	100.0
Household size							
1-2	92.5	2.8	4.7	0.0	0.0	0.0	100.0
3-4	88.0	0.7	10.0	0.6	0.7	0.0	100.0
5-6	86.9	3.9	6.5	2.0	0.7	0.0	100.0
7+	76.2	4.3	13.7	1.5	2.9	1.4	100.0
Socio-economic Group							
Employee	53.2	7.2	34.8	0.0	4.9	0.0	100.0
Self-employed - agric	88.0	2.9	7.1	1.2	0.9	0.0	100.0
Self-employed - other	78.6	2.7	10.3	0.0	3.5	5.0	100.0
Other	78.7	0.0	18.6	2.7	0.0	0.0	100.0
Gender of the head of household							
Male	83.1	3.4	10.6	1.0	1.4	0.4	100.0
Female	95.7	0.6	2.1	1.7	0.0	0.0	100.0

Source: CWIQ 2006 Ngara DC

Table 6.15: Percent distribution of households by the perception of the crime a
and security situation of the community compared to the year before the survey

	Much Worse	Worse	Same	Better	Much Better	Don't Know	Total
Total	4.2	20.4	44.1	28.0	3.0	0.2	100.0
Cluster Location							
Accessible	3.7	19.3	45.7	28.0	3.0	0.3	100.0
Remote	4.7	21.6	42.6	28.0	3.0	0.0	100.0
Poverty Status							
Poor	6.0	19.7	43.0	28.8	2.6	0.0	100.0
Non-poor	3.8	20.4	44.5	28.0	3.2	0.2	100.0
Household size							
1-2	7.8	19.7	47.9	22.3	1.1	1.2	100.0
3-4	3.1	21.8	43.0	28.3	3.7	0.0	100.0
5-6	5.2	14.1	50.3	28.3	2.0	0.0	100.0
7+	2.1	27.5	34.9	30.8	4.6	0.0	100.0
Area of land owned by the household							
None	20.1	26.6	38.4	14.9	0.0	0.0	100.0
< 1 ha	0.0	16.8	61.3	21.9	0.0	0.0	100.0
1-1.99 ha	4.5	19.1	43.0	30.5	2.3	0.6	100.0
2-3.99 ha	3.7	22.6	44.4	26.1	3.2	0.0	100.0
4-5.99 ha	3.1	12.9	49.7	28.2	6.1	0.0	100.0
6+ ha	5.5	25.3	30.3	35.7	3.3	0.0	100.0
Type of livestock owned by the household							
None	5.6	19.3	44.9	28.3	1.5	0.4	100.0
Small only	3.1	19.4	44.9	27.9	4.7	0.0	100.0
Large only	5.1	28.8	37.8	22.3	6.1	0.0	100.0
Both	2.1	26.1	40.2	29.4	2.2	0.0	100.0
Socio-economic Group							
Employee	8.3	22.8	33.8	27.9	7.2	0.0	100.0
Self-employed - agric	4.7	20.9	41.6	29.5	3.3	0.0	100.0
Self-employed - other	0.0	11.0	73.5	15.5	0.0	0.0	100.0
Other	0.0	23.1	54.0	20.1	0.0	2.8	100.0
Gender of the head of household							
Male	4.7	19.2	45.8	26.8	3.5	0.0	100.0
Female	2.5	25.7	37.0	33.0	0.9	0.9	100.0
Marital status of the head of household							
Single	0.0	34.9	46.0	19.1	0.0	0.0	100.0
Monogamous	5.2	19.0	47.3	24.8	3.7	0.0	100.0
Polygamous	2.6	17.3	44.4	32.1	3.7	0.0	100.0
Loose union	2.3	21.3	29.0	42.1	5.3	0.0	100.0
Widow/div/sep	3.8	23.5	41.1	30.1	0.7	0.7	100.0
Education level of the head of household							
None	6.7	20.8	38.9	31.0	2.1	0.5	100.0
Primary	2.9	20.1	47.2	26.5	3.3	0.0	100.0
Secondary +	4.7	22.2	40.6	26.8	5.6	0.0	100.0

Source: CWIQ 2006 Ngara DC

Base for percentage is all households

6.5   Perception of Crime and Security in the Community

This section gives an overview of how the district's residents perceive the current crime and security situation compared to the year preceding the survey. Respondents were asked to categorise the current crime and security situation as the same, better or worse than the previous year. Results are shown in table 6.15. 31 percent of the households reported it was better, 44 percent said it was the same while 24 percent reported it as worse.

The percentage of households with seven or more members who reported current crime and security situation as better is higher than that of households with one or two members at 36 and 23 percent respectively.

The breakdown by socio-economic group shows that, while 8 percent of employees report the crime and security situation as much worse, the share for self-employed in non-agricultural activities and 'other' socio-economic group are virtually null. The percentage of male-headed households who reported the crime and security situation as worse is slightly higher than that of female-headed households at 29 and 24 percent respectively. Likewise, the percentage of single headed households who reported a worse crime and security situation is higher than that of polygamous and monogamous households at 35 and about 20 percent respectively.

6.6   Household Income Contributions

Table 6.16 shows the percent distribution of households by main income contributor to household income. The survey includes information on household income

contributions by listing all the income contributors in the households and then identifying the household member who contributes the largest portion. For the great majority (88 percent) of households the head is the main contributor.

While 92 percent of household with one or two members and those with seven or more members the household head is the main contributor, only about 86 percent of households with three to six members report the household head as the main contributor.

The breakdown by socio-economic group of the households shows that while all the employees reported the household head as the main income contributor, the share for households belonging to the 'other' socio-economic group is only 32 percent. The breakdown by gender of the household head shows that 8 percent of male-headed households reported a spouse as the main income contributor compared to only 1 percent of female-headed households.

6.7   Other Household Items

Table 6.17 shows the percent distribution of households owning selected household items. 67 percent of households own at least a mattress or bed, 54 percent own a radio, 39 percent own a watch or clock and 13 percent own an electric iron. Although no household owns a fixed line phone, 8 percent own a mobile phone.

Households in accessible clusters and non-poor households have higher rates of ownership in almost every selected item, the largest differences being in ownership of a mattress or bed and of a radio.

The breakdown by household size shows that the shares of ownership are larger for larger households and for male-headed households. In addition, employees and self-employed in non-agricultural activities show higher rates of ownership than the other socio-economic groups.

Table 6.16: Percentage distribution of households by principal contributor to household income

	Principal contributor of income				
	Head	Spouse	Child	Other	Total
Total	88.4	6.6	2.4	2.6	100.0
Cluster Location					
Accessible	88.6	7.9	1.6	1.9	100.0
Remote	88.3	5.3	3.1	3.4	100.0
Poverty Status					
Poor	89.2	4.3	4.9	1.5	100.0
Non-poor	88.2	7.2	1.7	2.9	100.0
Household size					
1-2	91.8	3.0	0.0	5.2	100.0
3-4	86.5	4.7	5.4	3.4	100.0
5-6	86.1	9.7	1.7	2.6	100.0
7+	92.0	7.0	0.9	0.0	100.0
Socio-economic Group					
Employee	100.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	91.9	4.9	1.7	1.5	100.0
Self-employed - other	91.6	4.2	0.0	4.2	100.0
Other	32.4	34.4	15.0	18.1	100.0
Gender of the head of household					
Male	89.0	7.9	1.5	1.6	100.0
Female	86.0	1.0	6.3	6.7	100.0

Source: CWIQ 2006 Ngara DC

Table 6.17: Percentage of households owning selected household items

	Iron	Refrigerator	Sewing machine	Modern stove	Mattress or bed	Watch or clock	Radio	Televison	Fixed line phone	Mobile phone
Total	13.3	0.0	3.7	2.8	66.5	39.2	53.6	0.4	0.0	7.9
Cluster Location										
Accessible	18.5	0.0	4.5	4.6	77.4	43.8	58.4	0.8	0.0	12.7
Remote	8.2	0.0	2.9	1.0	55.8	34.6	48.9	0.0	0.0	3.1
Poverty Status										
Poor	3.3	0.0	2.8	0.0	42.9	23.3	21.4	0.0	0.0	0.0
Non-poor	15.7	0.0	3.5	3.5	72.5	43.2	62.0	0.5	0.0	9.7
Household size										
1-2	5.7	0.0	1.3	0.4	42.7	23.2	32.4	0.0	0.0	3.0
3-4	13.1	0.0	1.3	0.7	64.7	30.7	46.9	0.0	0.0	7.6
5-6	13.4	0.0	2.1	4.1	72.5	43.1	57.5	0.7	0.0	6.5
7+	18.4	0.0	10.3	5.3	76.1	55.0	70.7	0.7	0.0	13.3
Socio-economic Group										
Employee	54.2	0.0	26.1	19.5	81.1	74.0	74.0	4.9	0.0	55.4
Self-employed - agric	10.3	0.0	2.1	1.6	66.1	37.0	52.2	0.0	0.0	4.4
Self-employed - other	40.6	0.0	12.0	12.0	79.2	60.1	73.3	3.5	0.0	35.8
Other	2.7	0.0	3.1	0.0	50.8	26.5	41.9	0.0	0.0	0.0
Gender of the head of household										
Male	14.4	0.0	3.8	3.4	69.8	43.0	59.9	0.5	0.0	9.4
Female	8.9	0.0	3.0	0.3	52.9	23.2	27.5	0.0	0.0	1.9

Source: CWIQ 2006 Ngara DC

7   Household Amenities

This chapter analyses household main amenities. The first section gives information on the main materials used to construct dwellings, and the type of housing unit the household lives in. Section two reports were the main source of drinking water and type of toilet. In section three, the fuel used by the household both for cooking and lighting is analysed. Section four reports distance between households with different facilities such as source of drinking water, schools, and market. In section five, the anti-malaria measures taken by households are analysed.

7.1 Housing Materials and Type of Housing Unit

Table 7.1 shows the distribution of households according to the type of roofing material used for the household. In this section the main household respondent was asked to identify the main material used for roofing. A t the time of the survey, 74 percent of households used iron sheets to roof their dwellings while 21 percent of the households reported the use of thatch.

Analysis of the information by cluster location shows that a large number of households use iron sheets for roofing independently of their location. However, the portion of households using iron sheets is larger in accessible cluster than in remote ones. While just above half (54 percent) of the poor households use iron sheets for roofing above three quarters (79 percent) of the non-poor use this material.

Looking at distribution by household size, it is observed that the percentage of households using iron sheets increases with increase in household size. In contrast, the percentage of households using thatch for roofing decreases with increase in household size. Disaggregation by socio-economic group of the household, which is obtained by identifying the socio-economic group of the main income contributor in the household, shows that 96 percent of households where the main income earner is an employee has iron sheets roofing. Although the percentage of those using iron sheets is lower in other socio-economic groups, these percentages range between 70 and 83 percent. The portion of female-headed households using iron sheets for roofing exceeds that of male-

Table 7.1: Percent distribution of households by material used for roof of the house

	Mud	Thatch	Wood	Iron Sheets	Cement/ concrete	Roofing tiles	Asbestos	Other	Total
Total	0.0	20.9	0.0	73.8	0.0	0.0	0.0	5.3	100.0
Cluster Location									
Accessible	0.0	11.0	0.0	85.6	0.0	0.0	0.0	3.4	100.0
Remote	0.0	30.7	0.0	62.2	0.0	0.0	0.0	7.1	100.0
Poverty Status									
Poor	0.0	39.2	0.0	54.2	0.0	0.0	0.0	6.6	100.0
Non-poor	0.0	16.3	0.0	78.8	0.0	0.0	0.0	4.9	100.0
Household size									
1-2	0.0	32.7	0.0	59.4	0.0	0.0	0.0	7.9	100.0
3-4	0.0	18.6	0.0	75.1	0.0	0.0	0.0	6.3	100.0
5-6	0.0	20.6	0.0	75.7	0.0	0.0	0.0	3.7	100.0
7+	0.0	17.0	0.0	78.8	0.0	0.0	0.0	4.2	100.0
Socio-economic Group									
Employee	0.0	3.9	0.0	96.1	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	0.0	22.7	0.0	72.5	0.0	0.0	0.0	4.8	100.0
Self-employed - other	0.0	7.3	0.0	83.1	0.0	0.0	0.0	9.6	100.0
Other	0.0	20.5	0.0	69.9	0.0	0.0	0.0	9.6	100.0
Gender of the head of household									
Male	0.0	21.4	0.0	72.8	0.0	0.0	0.0	5.8	100.0
Female	0.0	18.8	0.0	78.1	0.0	0.0	0.0	3.1	100.0

Source:CWIQ 2006 Karagwe DC

Table 7.2: Percent distribution of households by material used for walls of the house

	Mud/ mud bricks	Stone	Burnt bricks	Cement/ sandcrete	Wood/ bamboo	Iron sheets	Cardboard	Total
Total	85.1	0.0	12.0	2.2	0.7	0.0	0.0	100.0
Cluster Location								
Accessible	76.5	0.0	19.2	3.8	0.6	0.0	0.0	100.0
Remote	94.1	0.0	4.5	0.5	0.9	0.0	0.0	100.0
Poverty Status								
Poor	94.2	0.0	3.0	1.3	1.5	0.0	0.0	100.0
Non-poor	83.1	0.0	13.9	2.4	0.5	0.0	0.0	100.0
Household size								
1-2	87.8	0.0	8.9	0.0	3.3	0.0	0.0	100.0
3-4	87.8	0.0	7.8	3.4	1.0	0.0	0.0	100.0
5-6	87.8	0.0	9.4	2.8	0.0	0.0	0.0	100.0
7+	76.6	0.0	22.4	1.0	0.0	0.0	0.0	100.0
Socio-economic Group								
Employee	58.2	0.0	41.8	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	87.9	0.0	9.0	2.3	0.9	0.0	0.0	100.0
Self-employed - other	64.2	0.0	31.6	4.2	0.0	0.0	0.0	100.0
Other	87.1	0.0	12.9	0.0	0.0	0.0	0.0	100.0
Gender of the head of household								
Male	83.5	0.0	12.9	2.7	0.9	0.0	0.0	100.0
Female	91.7	0.0	8.3	0.0	0.0	0.0	0.0	100.0

Source:CWIQ 2006 Karagwe DC

Table 7.3: Percent distribution of households by material used for floors of the house

	Mud/ earth	Wood/ plank	Tiles	Concrete/ cement	Grass	Other	Total
Total	52.0	0.0	0.0	8.3	39.1	0.6	100.0
Cluster Location							
Accessible	41.0	0.0	0.0	14.5	43.9	0.6	100.0
Remote	62.8	0.0	0.0	2.3	34.3	0.6	100.0
Poverty Status							
Poor	50.6	0.0	0.0	4.1	44.8	0.5	100.0
Non-poor	52.6	0.0	0.0	9.1	37.6	0.7	100.0
Household size							
1-2	64.0	0.0	0.0	3.0	31.7	1.4	100.0
3-4	54.2	0.0	0.0	5.5	39.3	1.1	100.0
5-6	49.5	0.0	0.0	8.6	42.0	0.0	100.0
7+	44.8	0.0	0.0	15.2	39.6	0.4	100.0
Socio-economic Group							
Employee	23.8	0.0	0.0	36.7	39.5	0.0	100.0
Self-employed - agriculture	55.0	0.0	0.0	5.3	39.0	0.7	100.0
Self-employed - other	23.0	0.0	0.0	31.6	45.4	0.0	100.0
Other	56.8	0.0	0.0	9.5	33.7	0.0	100.0
Gender of the head of household							
Male	52.1	0.0	0.0	8.9	38.4	0.5	100.0
Female	51.4	0.0	0.0	5.9	41.7	1.0	100.0

Source:CWIQ 2006 Karagwe DC

headed households by 5 percentage points at 78 and 73 percent respectively.

Table 7.2 shows the distribution of households by type of material used for walls of the dwelling. Overall, 85 percent of the households use mud or mud bricks, 12 percent use burnt bricks, 2 percent use cement or sand Crete and 1 percent use wood or bamboo.

Table 7.4: Percent distribution of households by type of housing unit

	Single room	Flat	Two or more rooms	Whole building	Other	Total
Total	0.7	0.0	1.8	97.5	0.1	100.0
Cluster Location						
Accessible	0.6	0.0	2.9	96.6	0.0	100.0
Remote	0.8	0.0	0.7	98.4	0.2	100.0
Poverty Status						
Poor	0.0	0.0	2.7	96.9	0.5	100.0
Non-poor	0.8	0.0	1.5	97.6	0.0	100.0
Household size						
1-2	2.6	0.0	1.1	96.2	0.0	100.0
3-4	0.9	0.0	2.3	96.8	0.0	100.0
5-6	0.0	0.0	2.8	97.2	0.0	100.0
7+	0.0	0.0	0.0	99.6	0.4	100.0
Socio-economic Group						
Employee	7.8	0.0	0.0	92.2	0.0	100.0
Self-employed - agriculture	0.5	0.0	1.8	97.6	0.1	100.0
Self-employed - other	0.0	0.0	0.0	100.0	0.0	100.0
Other	0.0	0.0	4.4	95.6	0.0	100.0
Gender of the head of household						
Male	0.5	0.0	2.2	97.2	0.1	100.0
Female	1.4	0.0	0.0	98.6	0.0	100.0

Source:CWIQ 2006 Karagwe DC

The breakdown by cluster location shows that in accessible clusters, 77 percent of households use mud/mud bricks and 19 percent use brunt bricks while in remote clusters 94 percent use mud/mid bricks and 5 percent use burnt bricks. Despite the fact that most households use mud/mud bricks as the main material for construction, the percentage of non-poor households using burnt bricks exceeds that of poor households by 10 percentage points.

Table 7.3 shows the percentage distribution of households by main material in the walls. 88 percent of households having one to six members use mud/mud brick for constructing walls while the share of households with seven or more members that report mud or mud bricks is 77 percent. Breakdown of this information by socio-economic group shows that the largest share of households using burnt bricks (42 percent) is those where the main income contributor is an employee followed by households where the main income earner is self-employed in non-agricultural activities (32 percent).

Table 7.3 shows the percentage distribution of households by main flooring material. Around half (52 percent) the households reported having mud/earth flooring. 39 percent of households reported the use of grass and 8 percent the use of concrete/cement as the main flooring material. There is a difference of 13 percentage points between households using concrete/cement for flooring among households located in accessible and remote clusters at 15 and 2 percent respectively.

Analysis of the data by household size shows that the use of mud/earth as the main flooring material decreases with increase in household size while the use of concrete/cement increases with increase in household size

7.2 Water and sanitation

Table 7.4 shows the distribution of households according to the main source of drinking water. Households were asked to identify where they usually get their drinking water. It is observed that only one-fifth of households get drinking water from a safe source. Most households get drinking water from a river/lake/pond (45 percent), 21 percent from an unprotected well and 19 percent from a borehole or hand pipe. Only 3 percent of households get drinking water from a treated pipe borne. Only 1 percent of households use water from a protected well, and the same portion of households is dependent on rainwater

Categorising this distribution by poverty status shows that the percentage of poor households having access to a safe source of water exceeds that of non-poor households by 5 percentage points. While the percentage of households fetching water from an unprotected well increases with increase in household size, the percentage of those fetching water from a river, lake or pond decreases with increase in household size.

Table 7.5: Percent distribution of households by main source of drinking water

	Pipe borne treated	Pipe borne untreated	Bore hole/hand pump	Protected well	Unprotected well	Rain water	River, lake or pond	Vendor, truck	Other	Total	Safe source
Total	3.3	9.2	19.3	0.6	20.9	0.5	45.2	0.5	0.5	100.0	23.1
Cluster Location											
Accessible	1.4	12.5	20.8	0.3	22.1	1.0	40.8	1.1	0.0	100.0	22.5
Remote	5.1	6.0	17.7	0.8	19.7	0.0	49.6	0.0	1.0	100.0	23.6
Poverty Status											
Poor	2.5	8.1	23.5	0.8	16.3	0.0	48.7	0.0	0.0	100.0	26.8
Non-poor	3.5	9.6	18.3	0.5	22.0	0.6	44.2	0.7	0.6	100.0	22.2
Household size											
1-2	4.6	6.1	14.2	0.0	17.9	1.9	53.5	0.0	1.7	100.0	18.9
3-4	4.2	8.3	21.3	0.9	18.0	0.0	46.4	0.9	0.0	100.0	26.4
5-6	3.6	10.5	21.0	0.4	18.4	0.7	43.9	0.9	0.8	100.0	24.9
7+	0.9	10.8	17.4	0.7	30.0	0.0	40.2	0.0	0.0	100.0	19.0
Socio-economic Group											
Employee	6.4	30.1	29.3	0.0	14.7	0.0	19.5	0.0	0.0	100.0	35.8
Self-employed - agric	3.2	8.0	18.2	0.3	20.6	0.6	48.2	0.3	0.6	100.0	21.7
Self-employed - other	4.5	17.5	12.2	0.0	23.2	0.0	38.3	4.2	0.0	100.0	16.7
Other	1.6	5.3	34.9	4.5	26.8	0.0	26.9	0.0	0.0	100.0	41.1
Gender of the head of household											
Male	3.6	9.7	18.2	0.7	21.4	0.6	44.6	0.7	0.6	100.0	22.5
Female	2.0	7.5	23.7	0.0	18.7	0.0	48.0	0.0	0.0	100.0	25.7

Source:CWIQ 2006 Karagwe DC

Table 7.6: Percent distribution of households by main type of toilet

	None (bush)	Flush to sewer	Flush to septic tank	Pan/ bucket	Covered pit latrine	Uncovered pit latrine	Ventilated pit latrine	Other	Total	Safe sanitation
Total	16.3	0.0	0.0	0.0	47.2	36.1	0.5	0.0	100.0	47.2
Cluster Location										
Accessible	11.1	0.0	0.0	0.0	48.9	39.0	1.1	0.0	100.0	48.9
Remote	21.4	0.0	0.0	0.0	45.4	33.2	0.0	0.0	100.0	45.4
Poverty Status										
Poor	23.6	0.0	0.0	0.0	37.2	39.3	0.0	0.0	100.0	37.2
Non-poor	14.5	0.0	0.0	0.0	49.7	35.2	0.7	0.0	100.0	49.7
Household size										
1-2	38.3	0.0	0.0	0.0	26.1	35.6	0.0	0.0	100.0	26.1
3-4	19.5	0.0	0.0	0.0	42.2	38.3	0.0	0.0	100.0	42.2
5-6	7.7	0.0	0.0	0.0	52.2	38.4	1.7	0.0	100.0	52.2
7+	9.5	0.0	0.0	0.0	60.2	30.3	0.0	0.0	100.0	60.2
Socio-economic Group										
Employee	14.9	0.0	0.0	0.0	85.1	0.0	0.0	0.0	100.0	85.1
Self-employed - agriculture	15.6	0.0	0.0	0.0	46.1	37.9	0.4	0.0	100.0	46.1
Self-employed - other	13.8	0.0	0.0	0.0	57.7	24.9	3.5	0.0	100.0	57.7
Other	27.9	0.0	0.0	0.0	29.0	43.1	0.0	0.0	100.0	29.0
Gender of the head of household										
Male	12.9	0.0	0.0	0.0	49.5	37.0	0.7	0.0	100.0	49.5
Female	30.4	0.0	0.0	0.0	37.4	32.2	0.0	0.0	100.0	37.4

Source:CWIQ 2006 Karagwe DC

Households where the main income earner belongs to the 'other' socio-economic group have the highest access to a safe source of drinking water followed by households where the main contributor is an employee.

Table 7.5 shows the percentage distribution of households by main type of toilet. Overall, roughly half the households have safe sanitation. In general, 84 percent of the households reported having pit latrines and 16 percent said they had no latrines (excrete in bushes).

The percentage of households that practice safe sanitation in accessible clusters exceeds that in remote clusters by 4 percentage points. Looking at the breakdown by poverty status, 24 percent of poor households don't have latrines compared to 15 percent of the non-poor.

The breakdown by household size shows a clear trend, with the share of households with safe sanitation increasing as the number of household member's increases.

The breakdown by socio-economic group shows that the 'other' category has a higher share of households with safe water sources at 41 percent, followed by the employees at 36 percent.

The breakdown by gender of the household head shows that female-headed households have a higher share of households with access to safe water sources than male-headed households.

7.3 Type of Fuel

Table 7.7 shows the distribution of households by type of fuel used for cooking. Virtually all households are dependent on firewood for cooking. The type of fuel used does not vary by cluster location, poverty status, household size or gender of household head. A small variation is observed when the information is broken down by socio-economic group where 5 percent of households where the main income contributor is an employee use charcoal for cooking.

The survey also collected information on the type of fuel used for lighting. 97 percent of the households reported using kerosene/paraffin for lighting and 3 percent reported using firewood. The ratio of households using firewood for lighting is slightly higher in remote clusters compared to accessible clusters. Disaggregation by household size shows that the tendency of using firewood for lighting is higher in households with few members than in households with many members. There are no major differences between socio-economic groups or gender

Table 7.7: Percent distribution of households by fuel used for cooking

	Firewood	Charcoal	Kerosene/oil	Gas	Electricity	Crop residue/ sawdust	Animal waste	Other	Total	Non-wood fuel for cooking
Total	99.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Cluster Location										
Accessible	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Remote	99.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Poverty Status										
Poor	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Non-poor	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Household size										
1-2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
3-4	99.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
5-6	99.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7+	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Socio-economic Group										
Employee	94.9	5.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Self-employed - agriculture	99.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Self-employed - other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Gender of the head of household										
Male	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Female	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0

Source:CWIQ 2006 Karagwe DC

Table 7.8: Percent distribution of households by fuel used for lighting

	Kerosene/ paraffin	Gas	Mains electricity	Solar panels/ generator	Battery	Candles	Firewood	Other	Total
Total	96.7	0.0	0.0	0.2	0.0	0.0	2.9	0.2	100.0
Cluster Location									
Accessible	98.7	0.0	0.0	0.5	0.0	0.0	0.4	0.4	100.0
Remote	94.7	0.0	0.0	0.0	0.0	0.0	5.3	0.0	100.0
Poverty Status									
Poor	98.1	0.0	0.0	0.0	0.0	0.0	1.9	0.0	100.0
Non-poor	96.3	0.0	0.0	0.3	0.0	0.0	3.1	0.3	100.0
Household size									
1-2	89.7	0.0	0.0	0.0	0.0	0.0	10.3	0.0	100.0
3-4	98.3	0.0	0.0	0.0	0.0	0.0	1.0	0.7	100.0
5-6	96.6	0.0	0.0	0.7	0.0	0.0	2.7	0.0	100.0
7+	99.1	0.0	0.0	0.0	0.0	0.0	0.9	0.0	100.0
Socio-economic Group									
Employee	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	96.6	0.0	0.0	0.0	0.0	0.0	3.4	0.0	100.0
Self-employed - other	96.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	100.0
Other	96.4	0.0	0.0	0.0	0.0	0.0	0.0	3.6	100.0
Gender of the head of household									
Male	97.3	0.0	0.0	0.3	0.0	0.0	2.4	0.0	100.0
Female	94.2	0.0	0.0	0.0	0.0	0.0	4.7	1.1	100.0

Source:CWIQ 2006 Karagwe DC

of the household head. It is important to note that there are no households that reported the use of gas, electricity, batteries or candled for lighting.

7.4 Distances to facilities

Table 7.8 shows the distribution of households by time to reach the nearest drinking water supply and health facility. Data on this section was solely based on the respondent's answer. The survey did not use any other measurements to confirm this information.

Overall, 71 percent of the households are located within 30 minutes to their nearest drinking water source. Three quarters of the population in accessible clusters live within 30 minutes of a drinking water supply compared to 68 percent of those in remote clusters. The comparison between poor and non-poor households shows that 20 percent and 13 percent respectively live more than 60 minutes away from their main drinking water supply.

Breakdown by socio-economic category shows that households where the main income earner is self-employed in non-agricultural activities live closest to the main drinking water source compared to households belonging to other socio-economic groups.

Distribution of households by the time it takes to reach the closest health facility shows that two-thirds of all households live more than one hour away from a health facility. More than three quarters of households located in remote clusters report living more than one hour away from a health facility while just above half report the same in accessible clusters. Non-poor households live closer to health facilities than poor households. Only 5 percent of poor households are located within 15 minutes of a health facility compared to 16 percent of non-poor households.

The breakdown by socio-economic category shows that households where the main income earner is self-employed in a non-agricultural sector live closest to health facilities while those where the main contributor is self-employed in agriculture live furthest. There are no observable differences among male and female-headed households.

Table 7.9 shows the percent distribution of households by time to reach the nearest primary and secondary school. Overall, just above half the households are located

within 30 minutes reach to the nearest primary school. 69 percent of households in accessible clusters have access to primary schools, whereas the share for households in remote villages is 34 percent.

The breakdown by socio-economic group shows that individuals living in households where the main income earner is self-employed in a non-agricultural sector tend to live closest to primary schools, followed by those living in households where the main contributor is an employee.

77 percent of all households live more than an hour away from the nearest secondary school. Only 4 percent of the households live within 15 minutes of a secondary school. Cluster location shows correlation with the distance to a secondary school. About 94 percent of households located in remote clusters are more than 60 minutes away from the nearest secondary school compared to 60 percent of those located accessible clusters. The same conditions are observed between the poor and non-poor. The portion of poor households located more than one hour away from a secondary school exceeds that of non-poor households by 18 percentage points.

Household size does not seem to have correlation with distance to secondary school. In contrast, socio-economic group of the household shows correlation with distance to secondary school. Households belonging to the 'self-employed agriculture' group live furthest from secondary schools followed by household belonging to the 'other' socio-economic group.

Table 7.10 shows the distribution of households by time to reach the nearest food market and public transportation. Just above half the total households live within 60 minutes reach to the nearest food market. Households located in accessible clusters are closer to food markets than households located in remote clusters. The percentage of households located more than 60 minutes from the nearest market in remote clusters in about twice of that in accessible clusters. Individuals belonging to the 'self-employed – other' socio-economic group tend to live closer to food markets than individuals belonging to other socio-economic groups. Gender of the household head does not show any correlation with distance to a food market.

About two-thirds of the households live an hour or less of public transport. As anticipated in the introduction of the chapter, cluster location shows high

Table 7.9: Percent distribution of households by time (in minutes) to reach nearest drinking water supply and health facility

	Drinking water supply					Health facility				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	43.2	28.1	14.3	14.5	100.0	13.8	8.1	13.2	65.0	100.0
Cluster Location										
Accessible	38.2	37.0	12.3	12.6	100.0	25.3	10.7	11.6	52.4	100.0
Remote	48.1	19.4	16.2	16.3	100.0	2.4	5.5	14.7	77.5	100.0
Poverty Status										
Poor	37.0	26.3	16.7	20.0	100.0	5.1	5.3	17.1	72.5	100.0
Non-poor	44.8	28.4	13.7	13.1	100.0	15.8	8.6	12.2	63.4	100.0
Household size										
1-2	49.5	21.4	19.7	9.4	100.0	15.5	3.2	8.1	73.2	100.0
3-4	48.1	21.6	11.2	19.0	100.0	15.8	9.4	9.7	65.1	100.0
5-6	38.9	33.7	15.9	11.5	100.0	13.9	11.1	14.0	61.0	100.0
7+	38.3	33.4	12.6	15.7	100.0	9.9	5.3	19.8	65.0	100.0
Socio-economic Group										
Employee	56.6	21.3	7.2	15.0	100.0	20.7	11.0	8.8	59.5	100.0
Self-employed - agriculture	41.7	27.3	15.7	15.2	100.0	10.2	8.1	14.2	67.5	100.0
Self-employed - other	58.1	35.9	0.0	6.1	100.0	46.1	3.7	14.8	35.4	100.0
Other	39.1	35.6	12.9	12.5	100.0	24.0	10.9	0.0	65.2	100.0
Gender of the head of household										
Male	42.2	29.5	14.5	13.7	100.0	14.0	7.4	12.6	65.9	100.0
Female	46.9	22.3	13.3	17.5	100.0	12.7	10.7	15.4	61.2	100.0

Source:CWIQ 2006 Karagwe DC

correlation with distance to public transport. 60 percent of households located in remote clusters are located more than 60 minutes away from public transport compared to 7 percent of households located in accessible clusters. Roughly similar differences are observed when analysing by poverty status.

The breakdown by socio-economic group shows that the 'self-employed other'

Table 7.10: Percent distribution of households by time (in minutes) to reach nearest primary and secondary school

	Primary school					Secondary school				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	22.6	28.9	25.7	22.8	100.0	4.4	6.0	12.4	77.3	100.0
Cluster Location										
Accessible	35.1	33.8	23.5	7.6	100.0	8.8	10.6	20.5	60.1	100.0
Remote	10.2	24.0	27.9	37.9	100.0	0.0	1.4	4.3	94.3	100.0
Poverty Status										
Poor	11.0	25.0	31.1	33.0	100.0	0.0	3.2	5.4	91.5	100.0
Non-poor	25.7	29.7	24.3	20.3	100.0	5.5	6.4	14.3	73.8	100.0
Household size										
1-2	19.3	33.8	25.5	21.4	100.0	8.4	5.8	4.9	80.9	100.0
3-4	21.6	33.7	22.9	21.8	100.0	6.5	5.2	12.3	75.9	100.0
5-6	25.4	24.1	29.5	20.9	100.0	1.4	6.5	11.8	80.3	100.0
7+	22.0	25.8	24.4	27.8	100.0	2.9	6.3	17.9	72.9	100.0
Socio-economic Group										
Employee	40.1	25.8	15.9	18.2	100.0	12.9	12.9	16.3	58.0	100.0
Self-employed - agriculture	19.4	30.0	26.8	23.8	100.0	2.9	5.1	11.0	81.0	100.0
Self-employed - other	52.0	17.8	20.6	9.6	100.0	16.7	14.7	28.9	39.7	100.0
Other	24.7	26.9	22.6	25.7	100.0	6.4	4.4	11.5	77.7	100.0
Gender of the head of household										
Male	22.3	29.5	25.6	22.6	100.0	4.0	6.3	12.7	77.0	100.0
Female	23.8	26.5	26.0	23.7	100.0	5.8	4.6	10.9	78.7	100.0

Source:CWIQ 2006 Karagwe DC

Table 7.11: Percent distribution of households by time (in minutes) to reach nearest food market and public transportation

	Food market					Public transportation				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	16.9	16.7	18.7	47.7	100.0	36.5	13.3	16.5	33.8	100.0
Cluster Location										
Accessible	28.8	21.3	17.0	32.9	100.0	62.3	17.4	13.0	7.3	100.0
Remote	5.1	12.2	20.3	62.3	100.0	11.0	9.2	20.0	59.8	100.0
Poverty Status										
Poor	11.9	17.4	16.8	53.9	100.0	30.9	12.7	11.4	45.1	100.0
Non-poor	18.0	16.6	19.3	46.2	100.0	38.2	13.1	17.9	30.8	100.0
Household size										
1-2	13.8	21.4	17.3	47.5	100.0	31.9	18.4	15.2	34.5	100.0
3-4	23.9	16.0	14.3	45.9	100.0	40.6	13.7	14.5	31.3	100.0
5-6	14.7	15.1	20.0	50.2	100.0	36.6	12.0	18.1	33.3	100.0
7+	12.7	16.8	23.4	47.1	100.0	34.0	11.1	17.8	37.1	100.0
Socio-economic Group										
Employee	28.5	11.0	16.6	43.9	100.0	36.6	7.8	26.0	29.6	100.0
Self-employed - agriculture	13.6	17.5	18.5	50.4	100.0	35.4	14.1	16.5	33.9	100.0
Self-employed - other	50.4	15.5	20.3	13.8	100.0	54.9	9.2	15.0	20.9	100.0
Other	20.3	9.9	20.8	49.0	100.0	31.5	8.8	12.8	46.9	100.0
Gender of head of household										
Male	16.6	17.6	18.6	47.2	100.0	35.7	15.0	16.9	32.4	100.0
Female	18.2	13.1	18.7	50.0	100.0	39.8	5.9	14.8	39.6	100.0

Source:CWIQ 2006 Karagwe DC

category has the highest access rate (64 percent) and the 'other' category reports the lowest at 40 percent. There are no major differences in access to public transport by, household size or gender of the household head.

7.5 Anti-Malaria Measures

The survey collected data on anti-malaria measures taken by households. 58 percent of the households reported to be taking anti-malaria measures. The most reported anti-malaria measure was good sanitation, followed by the use of herbs. At the time of the survey, 18 percent of households reported using bed nets and 24 percent reported using insecticide-treated nets.

Two-thirds and one-half of the households take anti-malaria measures in accessible and remote clusters respectively. While 62 percent of the non-poor households take anti-malaria measures, the share for poor households is lower, at 43 percent. A slightly higher proportion of poor households use bed nets compared to non-poor households. However, the reverse is true for treated nets. There is a difference of 7 percentage points between the non-poor and the poor using insecticide-treated nets at 25 and 18 percent respectively.

The breakdown by household size shows that measures taken increase with household size. In contrast, maintenance of good sanitation and the use of herbs decrease with household size.

The breakdown by socio-economic group of the household shows that households belonging to the 'employee' and 'self-employed other' are more likely to take anti-malaria measures than households belonging to other socio-economic groups. Furthermore, households belonging to the 'other' socio-economic group (category that includes unemployed, inactive, and domestic workers) are more likely to use herbs than any other anti-malaria measure. Those belonging to households where the main contributor is an employee or self-employed in a non-agricultural sector are most likely to use insecticide-treated nets over other measures while those belonging to the 'self-employed – agriculture' group are most likely to maintain good sanitation as an anti-malaria measure.

Finally, there are significantly higher proportions of male-headed households taking anti-malaria measures compared to female-headed households. While 61 percent of male-headed households take some anti-malaria measure, the share for female-headed households is only 49

Table 7.12: Percentage of households taking anti-malaria measures, by measures taken

	Measures taken	Use bed net	Insect-icide	Anti-malaria drug	Fumi-gation	Insecticide treated net	Maintain good drainage	Maintain good sanitation	Herbs	Burn leaves	Window/ door net	Other
Total	58.4	17.8	1.4	19.4	0.3	23.8	0.8	52.9	35.7	0.2	0.6	0.0
Cluster Location												
Accessible	66.6	16.4	1.7	21.5	0.5	24.0	0.0	57.8	38.6	0.0	1.0	0.0
Remote	50.3	19.5	1.0	16.6	0.0	23.6	1.7	46.6	31.9	0.4	0.0	0.0
Poverty Status												
Poor	42.7	22.7	0.0	19.4	0.0	17.9	0.0	35.7	41.7	0.0	0.0	0.0
Non-poor	62.4	16.4	1.6	19.0	0.3	25.0	0.9	55.7	34.3	0.2	0.7	0.0
Household size												
1-2	41.6	0.9	0.0	13.2	0.0	7.6	0.0	68.1	61.7	0.0	0.0	0.0
3-4	64.3	21.2	1.4	18.9	0.0	25.5	1.2	50.6	33.8	0.0	0.9	0.0
5-6	53.7	20.0	1.6	27.2	0.0	31.3	1.2	54.4	28.0	0.0	0.0	0.0
7+	67.6	17.8	1.6	14.2	1.1	20.2	0.0	48.4	36.2	0.6	1.0	0.0
Socio-economic Group												
Employee	82.6	29.7	18.1	15.1	5.9	64.6	0.0	21.3	18.9	0.0	5.7	0.0
Self-employed - agric	57.0	16.6	0.6	18.7	0.0	19.5	0.9	55.6	36.0	0.0	0.4	0.0
Self-employed - other	83.1	17.2	0.0	27.8	0.0	50.6	0.0	46.4	35.0	0.0	0.0	0.0
Other	36.9	28.9	0.0	18.9	0.0	0.0	0.0	52.1	51.9	4.4	0.0	0.0
Gender of the head of household												
Male	60.6	17.3	1.6	20.5	0.4	26.7	0.9	50.0	36.5	0.2	0.7	0.0
Female	49.0	20.1	0.0	14.0	0.0	9.1	0.0	68.1	31.5	0.0	0.0	0.0

Source:CWIQ 2006 Karagwe DC

Base for cols 2 onwards is all households taking anti-malarial measures

percent. Furthermore, most female-headed households that takes anti-malaria measures report maintaining good sanitation. While the differences between households using herbs are small between male-headed and female-headed households, the percentage of female-headed households using insecticide-treated nets is lower than that in male-headed households at 9 and 27 percent, respectively.

Table 7.11 shows the percent distribution of households by type of housing unit they occupy. Overall, 98 percent of the households occupy the whole building where they live. Around 4 percent of those living in accessible clusters own some rooms compared to 2 percent in remote clusters. Disaggregation by socio-economic group shows that 8 percent of households where the main contributor is an employee own a single room. There are no differences by poverty status, household size or gender of the household head.

8 GOVERNANCE

The PMO-RALG CWIQ expanded the standard CWIQ survey instrument with several questions on governance. This chapter discusses the responses to these questions. The first section discusses attendance at kitongoji, village, ward and district meetings. Section 2 shows the results of questions aimed at measuring satisfaction with leaders at each of these levels. Section 3 concerns public spending at kitongoji, village, ward and district level and discusses to what extent financial information reaches households, as well as their satisfaction with public spending at each level.

8.1 Attendance at Meetings

Table 8.1 summarises responses to the following question "Did you or anyone in your household attend a meeting at [...] level in the past 12 months". This question was repeated 4 times with the dots replaced by kitongoji, village, ward and district. The results show that 86 percent of households had at least one member attending at least one kitongoji meeting in the past 12 months. Attendance at village meetings was slightly lower at 83 percent. Ward and district level meetings did not attain attendance of the majority of households at 21 and even 1 percent respectively.

 Looking at the breakdown of the results by poverty status, it can be seen that while there is no important difference in attendance at kitongoji or district level meetings, the non-poor seem to have better attendance rates at village and ward level meetings. Analysis of the results by socio-economic group shows that employees have an attendance rate of 63 percent while self-employed agriculture has a rate of 89 percent. Self-employed and other groups have similar attendance rates at kitongoji and village levels. Ward and district level meetings, however, are characterised by lower attendance rates of the self-employed in non-agricultural activities compared to those who are employed.

8.2 Satisfaction with Leaders

The main respondent was asked whether he or she considered the leaders at kitongoji, village, ward and district levels of government to be polite and helpful. For those who were not satisfied or answered that they did not know, the reasons for this were asked. For district councillors the question was phrased slightly differently and respondents were asked whether they were satisfied with their work and for those who responded "no" or "don't know" the reason for this response was asked.

The results, displayed in Table 8.2, show a clear trend of satisfaction with leaders going up as the level of government goes down. While, respectively, 83 percent and 78 percent of respondents say they are satisfied with kitongoji and village leaders, only 43 percent say the same of district leaders. This does not, however, mean that respondents specifically reported dissatisfaction with leaders at higher levels of government. In fact, the percentage of people claiming they are dissatisfied with leaders does not differ much between kitongoji, village, ward and district leaders. Rather, the number of people responding with "I don't know" increases for higher levels of government,

Table 8.1: Percentage distribution of attendance of meetings (any household member within past 12 months)

	Kitongoji Meeting	Village Meeting	Ward Meeting	District Meeting
Total	86	83	21	1
Cluster Location				
Accessible	84	85	23	1
Remote	88	81	19	1
Poverty Status				
Poor	85	74	19	0
Non-poor	87	85	22	1
Socio-economic Group				
Employee	63	73	4	0
Self-employed - agriculture	89	85	23	1
Self-employed - other	75	74	11	8
Other	78	66	18	0
No. of Obs.	450	450	450	450

Source:CWIQ 2006 Karagwe DC

Table 8.2 Percentage distribution of attendance of meetings
(any household member within past 12 months)

	Kitongoji Leaders	Village Leaders	Ward Leaders	District Leaders	District Councillor
Total					
Satisfied	83	78	66	43	75
Not Satisfied	16	21	18	11	14
Don't Know	1	1	16	45	12
Share Satisfied by Cluster Location					
Accessible	80	74	65	39	75
Remote	86	82	67	47	74
Share Satisfied by Poverty Status					
Poor	85	80	69	45	71
Non-poor	83	77	65	42	75
Share Satisfied by Socio-economic Group					
Employee	79	68	77	70	70
Self-employed - agriculture	85	80	69	43	74
Self-employed - other	76	74	53	40	85
Other	64	55	35	27	80
Reasons for Dissatisfaction (incl. don't know)					
Political differences	0	0	0	0	1
Embezzlement/corruption	25	27	16	1	6
They do not listen to people	39	35	12	1	7
Favouritism	23	26	17	5	9
Lazy/inexperienced	8	4	1	0	2
Personal Reasons	4	3	1	0	1
I see no results	24	21	17	8	18
They never visit us	34	29	65	94	31
No. of Obs.	450	450	450	450	450

Source:CWIQ 2006 Karagwe DC

Note: While the question for kitongoji, village, ward and district leaders was framed as: "do you thin at this level are polite and helpful', the question for the district councillor was framed as 'are you sati work of your district councillor?'

being District Leaders the top with 45.9 percent.

Breaking the results down by accessibility of the cluster and the poverty status of the household shows that respondents living in poorer households more remote villages have higher satisfaction ratings for all levels of government.

Disaggregating the ratings by socio-economic group shows that especially the others category has lower satisfaction ratings than the other socioeconomic groups.

Finally, all respondents who did not report that they were satisfied with the leaders at a certain level of government where asked why? The bottom part of Table 9.2 summarises the responses. Note that the base for the percentages here is the number of people who answered "doesn't know" or "no" to the question of whether they were satisfied with their leaders at the specified level.

The reasons for dissatisfaction are very different across the different levels of government. While at kitongoji level 34 percent of dissatisfy respondents complain that leaders never visit them, this figure goes up to 94 percent for district leaders. Failure to listen to people is the most commonly cited response at kitongoji and village level at 39 and 35 percent respectively, while it is less important at district level at only 1 percent. Favouritism is a commonly cited reason for dissatisfaction with kitongoji, village and ward leaders, but is less important for district leaders. The most common reason

for dissatisfaction with district councillors is their failure to visit them, followed by the complaint that no results of their work can be seen. A low percentage complains about embezzlement and corruption by the district leaders and the district councillor, while this complaint is more common for ward, village and kitongoji leaders.

8.3. Public Spending

This section discusses the results of questions on the extent to which financial information reached the sample of respondent, as well as their satisfaction with public spending. Table 8.3 shows the distribution of the percentage of respondents that reported having received financial information from four different levels of government. Information on village finances seems to reach the largest share of households at 21 percent. Information on kitongoji, ward and district finances reaches 10, 4 and 2 percent of the household's respectively. Overall slightly more households in accessible villages report receiving financial information than households in remote villages, especially on village finances. The breakdown by poverty status shows that a higher share of poor households receives information on kitongoji finances. In turn, a higher proportion of non-poor households receive information on village and ward finances.

The breakdown by socio-economic group shows that employees are the group with the highest share of households receiving information on village and district finances, whereas the self-employed in agriculture are the group with the highest share receiving information on kitongoji finances.

The results in Table 8.3 show that at all levels of government the most important method of acquiring information was attendance of meetings. Information received through rumours or hear-say scores second place at kitongoji and village levels.

Respondents were asked whether they were satisfied with spending at different levels of government and were requested to respond with either "yes", "no" or "don't know". Table 8.4 shows the results. Satisfaction with spending is higher for lower levels of government, 39 percent of respondents were satisfied with kitongoji spending and 35 percent with village

Table 8.3 Percentage distribution of attendance of meetings (any household member within past 12 months)

	Kitongoji Finances	Village Finances	Ward Finances	District Finances
Total	10	21	4	2
Cluster Location				
Accessible	10	24	5	3
Remote	9	18	3	1
Poverty Status				
Poor	15	18	1	1
Non-poor	8	22	5	2
Socio-economic Group				
Employee	4	33	0	8
Self-employed - agriculture	11	22	4	2
Self-employed - other	7	18	7	4
Other	0	2	2	0
Source				
Letter	0	0	0	15
Notice board	5	2	17	32
Meeting	88	96	81	39
Rumours/hear-say	10	4	9	15
Radio/newspapers	0	0	0	0
No. of Obs.	450	450	449	448

Source:CWIQ 2006 Karagwe DC

spending. Only 26 and 20 percent, respectively, reported the same for ward and district spending. This does not, however, mean that respondents specifically report dissatisfaction with spending for higher levels of government, rather the share of respondents reporting "I don't know" increases.

In line with the results on satisfaction with leaders, respondents living in poor households and in accessible villages consistently show slightly higher satisfaction rates than respondents living in non-poor households and in remote villages. The breakdown by socio-economic group shows that the employed group displays the highest satisfaction rates, except for kitongoji spending, where the self employed agriculture "other" group shows slightly higher rates.

When respondents were further queried why they were not satisfied, or why they did not know whether they were satisfied, the most common response was that they did not receive any information. The second most important response was that they saw no results arising from the public spending.

Table 8.4 Percentage distribution of attendance of meetings
(any household member within past 12 months)

	Kitongoji Spending	Village Spending	Ward Spending	District Spending
Total				
Satisfied	39	35	26	20
Not Satisfied	30	30	24	13
Don' Know	30	35	50	67
Share Satisfied by Cluster Location				
Accessible	42	36	26	19
Remote	37	34	25	21
Share Satisfied by Poverty Status				
Poor	41	38	24	23
Non-poor	39	34	26	19
Share Satisfied by Socio-economic Group				
Employee	38	49	33	41
Self-employed - agriculture	40	36	25	19
Self-employed - other	28	27	29	21
Other	42	21	22	17
Reasons for Dissatisfaction (incl. don't know)				
I see no results	27	21	17	11
Embezzlement/corruption	11	17	11	1
Favouritism	2	3	5	3
This is what I hear	2	4	4	1
They give no information	65	72	81	89
No. of Obs.	450	450	450	450

Source:CWIQ 2006 Karagwe DC

9 Changes between 2003 and 2006

This chapter will use the results of the 2003 Karagwe DC CWIQ to analyse changes in a selected set of indicators between the two surveys. Both the sampling methodology and the structure of the questionnaires allow comparisons between the surveys. 't' tests were performed to ensure statistical significance of the changes that take into account the clustered nature of the dataset. The null hypothesis in all cases was equality of means, so rejection of the null implies that the means are statistically different. These tests rely on two assumptions: normality of the distribution of each variable in the population and equality of variance in both samples. Violation of the first assumption does not pose serious problems in practice. Regarding the second assumption, one may be willing to assume equal variance between the two samples if it is considered that both are representative of the same population in two relatively close points in time.

Being estimates, the changes should not be read as points, but from the corresponding confidence intervals. For instance, Table 9.2 shows that share of primary school students who are satisfied with school increased by 12 percent, and that the confidence interval of the change runs from -24.4 and -0.4 percent. This should be read: 'the share of primary school students satisfied with school decreased between 0.4 and 24.4 percent'. If the confidence interval includes zero, it is said that the change is not significant. For the sake of space, the tables only show the 95 percent confidence intervals. However,

some researchers or policy makers may prefer 90 or 99 percent confidence intervals. Although they are not presented in the tables, stars indicate the significance level of each change. *, **, and *** represent significance at the 90, 95 and 99 percent of confidence. The text only discusses changes at the 95 percent of confidence.

Some caveats must be pointed out. In first place, the sample is not a panel, i.e. the households interviewed in 2003 were not re-interviewed interviewed in 2006. Therefore, only the overall changes can be analysed, not the evolution for individual households. For instance, as shown in Table 9.4, the share of population owning only small livestock did not change significantly between the two surveys. It must be kept in mind that this result does not mean that the households that owned small livestock in 2003 are the same ones that own small livestock in 2006.

In second place, changes in perception may depend on the population interviewed. The same circumstance can be catalogued as 'fair' by some people and 'unfair' by others. The impact of this caveat is minimised by securing randomness in the selection of sampled households.

Finally, the figures are just two dots in time, and do not necessarily imply the existence of a trend between them.

Section one presents changes in household characteristics. In section two, the evolution of education indicators is analysed. Changes in health are reported

Table 9.1: Household Characteristics

| | 2003 | 2006 | Change | | | | |
			Estimate	SE	Signif.	95% Confidence Interval	
Household Size							
1-2	13	15	1.6	2.17		-2.7	5.9
3-4	30	30	0.9	2.62		-4.3	6.2
5-6	33	31	-1.6	2.32		-6.3	3.0
7+	24	23	-0.9	2.74		-6.4	4.6
Mean Household Size	5.0	4.9	-0.1	0.17		-0.5	0.2
Female-headed Households	19	19	0.3	3.05		-5.8	6.4

Source: Karagwe DC CWIQ for 2003 and 2006

in section three. The last section presents an analysis of changes in household assets and perceptions of welfare.

9.1 Household characteristics

Household size has remained fairly stable, as would be expected from two surveys with a relatively short time gap. The percent distribution of households by number of members has remained statistically unaltered. In addition, the share of households headed by females has not changed at the 95 percent of confidence.

9.2 Education

Neither literacy nor net enrolment rates for primary school changed between the surveys. Net enrolment rate for secondary school decreased in comparison to the figure for 2003. In addition, it must be pointed out that the net enrolment rate for secondary school still lags far behind that for primary school.

Dissatisfaction with school has increased but for both levels of schooling. Regarding the reasons, the most important reductions are observed in lack of books and lack of teachers, which constitute the most important changes.

9.3 Health

The rates of need and use increased between 2003 and 2006, but the rate of satisfaction remained constant. The reasons for dissatisfaction that report the highest reductions are the 'lack of medicine' and 'unsuccessful treatment'. Conversely, the sharpest declines are observed in 'lack of professionals', and 'lack of medicine'. Long waits, shortage of trained professionals and costs remained unaltered at the 95 percent of confidence.

The share of people who did not consult reduced significantly, roughly between 24 and 34 percentage points. However, the reasons for not consulting did not change at the 95 percent of confidence.

There are no significant changes in the shares of people consulting each healthcare facility. Government hospitals are the facility with the highest rate of use in both surveys, with pharmacies in second place.

There has been an increase in the percentage of women giving birth in the 15-19 and 25-29 cohorts. Changes in the other cohorts are not significant at the 95 percent level. According to both surveys, virtually all pregnant women received pre-natal care. The share of women giving birth in hospitals has remained statistically unchanged at the 95 percent of confidence.

Table 9.2: Education

	2003	2006	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Literacy	71	67	-4	3.70		-11.5	3.3
Primary School							
Net Enrolment Rate	75	79	4	3.35		-2.8	10.6
Satisfaction	59	47	-12	5.99	**	-24.4	-0.4
Secondary School							
Net Enrolment Rate	16	12	-4	2.62	***	4.7	15.2
Satisfaction	85	47	-38	14.00	**	-67.3	-9.6
Dissatisfaction Rate	39	51	12	5.81	**	1.1	24.4
Reasons for dissatisfaction							
Books/Supplies	52	20	-32	9.46	***	-52.3	-14.4
Poor Teaching	7	11	4	4.53		-4.7	13.4
Lack of Teachers	74	48	-26	7.25	***	-42.0	-12.9
Bad Condition of Facilities	55	49	-6	9.59		-12.2	26.2
Overcrowding	19	29	10	7.19		-4.5	24.3

Source: CWIQ for 2003 and 2006

Table 9.3: Health

	2003	2006	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Medical Services							
Need	13	43	31	2.36	***	26.3	35.7
Use	13	42	29	16.26	***	263.9	329.0
Satisfaction	76	68	-8	5.30		-18.9	2.3
Reasons for Dissatisfaction							
Long wait	32	46	13	10.48		-10.2	31.9
Shortage of trained professionals	21	15	-6	6.39		-20.9	4.8
Cost	27	47	20	10.78	*	-2.2	41.2
No drugs available	38	7	-31	7.29	***	-46.2	-16.9
Unsuccessful treatment	41	4	-37	13.10	***	-64.7	-12.0
Percentage not Consulting	87	58	-29	2.58	***	-34.1	-23.8
Reasons for not consulting							
No need	93	91	-2	3.03		-7.9	4.3
Cost	10	6	-3	4.13		-11.5	5.0
Distance	6	3	-4	3.08		-9.7	2.6
Facility Used							
Private hospital	4	4	0	1.72		-3.2	3.7
Government hospital	59	52	-7	6.22		-19.4	5.5
Traditional healer	4	4	-1	1.83		-4.2	3.1
Pharmacy	10	33	23	3.38	***	15.7	29.2
Women who Had Live-Births							
15-19	1	6	5	2.24	**	0.8	9.7
20-24	28	32	3	6.55	*	-0.4	25.9
25-29	26	28	2	5.93	**	0.3	24.1
30-39	41	27	-15	5.23	*	-0.1	20.8
40+	4	2	-1	2.17		-3.4	5.3
Prenatal care	100	95	-5	0.03	*	-0.1	0.0
Facilities Used in Child Deliveries							
Hospital or maternity ward	29	29	0	5.89		-11.3	12.2
Delivery Assistance							
Doctor/Nurse/Midwife	28	29	1	6.26		-12.8	12.2
TBA	65	43	-22	5.52	***	-32.0	-9.9
Other/Self	7	27	21	4.37	***	12.0	29.5
Child Nutrition							
Stunted (-2SD)	50	38	-12	4.17	***	-22.1	-5.4
Severely Stunted (-3SD)	21	15	-6	3.31	*	-12.9	0.4
Wasted (-2SD)	6	4	-2	1.66	**	-6.7	0.0
Severely Wasted (-3SD)	2	1	-2	0.78	**	-3.2	-0.1

Source: CWIQ for 2003 and 2006

The last panel of the table shows child nutrition indicators, previously defined in section 4. All but one of the indicators shows a reduction at the 95 percent of confidence. The rate of stunting has decreased significantly, what is surprising for a long-term indicator of child malnutrition. The rate of severe stunting has remained constant at the 95 percent of confidence. The rates of wasting and severe wasting, short-term indicators, of child nutrition have decreased considerably.

9.4 Household Assets and Perceptions of Welfare

Table 9.4 analyses changes in household assets and on welfare perceptions. The share of households owning less land than the year preceding the survey reduced, and the share of households whose landholding remained constant increased. The distribution of households by landholding remained statistically unaltered. There were no changes for any type of livestock holding either.

The share of households that reported always having difficulties to satisfy food needs decreased between 8 and 23 percentage points. In the other extreme, the share of households reporting to have never experienced difficulties satisfying food needs also decreased, between 5 and 21 percentage points. The share of households reporting seldom difficulties increased between 20 and 34 percentage points, whereas the share of households reporting such difficulties 'sometimes' remained did not change.

Finally, the shares of people reporting deterioration of the economic situation of the household and the community have decreased in an important way. In the case of the economic situation of the community, the reduction is between 8 and 30 percentage points, whereas regarding the economic situation of the household the reduction is between 21 and 38 percentage points.

Table 9.4: Household Assets and Perception of Welfare

	2003	2006	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Landholding							
No holding	2	3	0	1.39		-2.3	3.3
Less	9	3	-5	1.66	***	-8.6	-2.0
Same	81	90	9	4.15	**	0.4	17.0
More	8	7	-1	2.87		-6.6	4.8
Difficulty satisfying food needs							
Never	26	13	-13	-12.88	***	-20.8	-5.0
Seldom	15	42	27	3.52	***	20.0	34.1
Sometimes	35	36	1	0.04		-7.6	10.4
Always	24	9	-16	3.96	***	-23.4	-7.6
Livestock							
No livestock	47	46	-1	4.49		-10.0	8.0
Small only	41	39	-2	4.61		-10.0	8.5
Large only	3	4	1	1.24		-1.5	3.5
Small and large	10	10	0	2.46		-4.2	5.6
Landholding (in acres)							
Mean	3	3	-0.2	0.28		-78.2	35.4
0	3	3	0	1.39		-2.3	3.3
0-0.99	5	7	2	1.63		-1.8	4.7
1-1.99	23	28	5	3.38		-2.2	11.3
2-3.99	40	39	-1	3.90		-8.3	7.3
4-5.99	20	13	-7	2.79		-9.4	1.8
6+	10	11	1	2.63		-7.5	3.0
Economic Situation Has Deteriorated							
Community	58	39	-19	5.40	***	-29.8	-8.2
Household	73	44	-29	4.27	***	-37.7	-20.6

Source: CWIQ for 2003 and 2006