

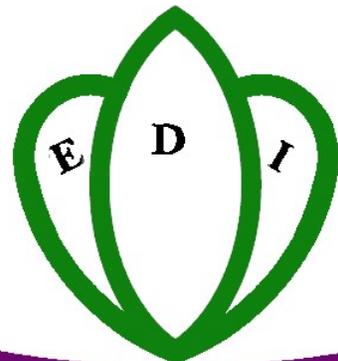
PMO-RALG

MUSOMA DC CWIQ
Survey on Poverty, Welfare and
Services in Musoma DC

November 2006

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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 was not attending school at the time of the survey.
<i>Health</i>	
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, Pertussis ³ , 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						
<i>Dependency ratio</i>	1.2	0.0	1.2	1.1	1.4	1.0
<i>Head is male</i>	77.8	2.4	73.1	84.1	80.8	76.2
<i>Head is female</i>	22.2	2.5	26.9	15.9	19.2	23.8
<i>Head is monagamous</i>	47.9	3.2	42.7	54.7	46.3	48.7
<i>Head is polygamous</i>	20.6	2.5	21.1	20.0	24.1	18.7
<i>Head is not married</i>	31.5	3.5	36.3	25.3	29.7	32.6
Household welfare						
Household economic situation compared to one year ago						
<i>Worse now</i>	59.9	3.8	53.7	68.1	68.2	55.4
<i>Better now</i>	22.8	3.0	27.6	16.5	18.0	25.5
Neighborhood crime/security situation compared to one year ago						
<i>Worse now</i>	18.3	3.0	16.8	20.3	21.2	16.7
<i>Better now</i>	45.0	2.8	45.4	44.5	44.5	45.3
Difficulty satisfying household needs						
<i>Food</i>	30.6	3.3	23.1	40.4	37.3	26.8
<i>School fees</i>	3.2	0.8	4.0	2.1	2.6	3.5
<i>House rent</i>	0.5	0.3	0.9	0.0	0.0	0.8
<i>Utility bills</i>	0.5	0.5	1.0	0.0	0.0	0.8
<i>Health care</i>	21.0	2.8	12.9	31.7	27.2	17.6
Agriculture						
Land owned compared to one year ago						
<i>Less now</i>	1.7	0.8	1.0	2.7	1.7	1.8
<i>More now</i>	2.9	1.4	3.8	1.7	1.7	3.5
Cattle owned compared to one year ago						
<i>Less now</i>	9.8	1.7	10.2	9.2	8.1	10.7
<i>More now</i>	6.0	1.2	5.6	6.5	7.8	5.0
Use of agricultural inputs						
<i>Yes</i>	41.3	4.3	39.1	44.2	45.1	39.2
<i>Fertilizers</i>	60.7	5.4	57.6	64.3	59.2	61.6
<i>Improved seedlings</i>	24.2	3.3	23.7	24.9	30.2	20.4
<i>Fingerlings</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Hooks and nets</i>	26.4	7.0	26.8	25.9	24.6	27.6
<i>Insecticides</i>	5.3	2.6	7.4	2.9	5.0	5.6
<i>Other</i>	0.7	0.6	1.2	0.0	0.0	1.1
Household infrastructure						
<i>Secure housing tenure</i>	7.1	2.3	12.1	0.4	1.7	10.1
<i>Access to water</i>	72.7	5.1	76.9	67.1	64.6	77.2
<i>Safe water source</i>	21.1	3.7	23.2	18.3	20.0	21.7
<i>Safe sanitation</i>	1.9	0.9	3.3	0.0	1.7	2.0
<i>Improved waste disposal</i>	23.7	5.6	18.7	30.2	31.3	19.5
<i>Non-wood fuel used for cooking</i>	0.5	0.3	0.9	0.0	0.0	0.8
Ownership of IT/Telecommunications Equipment						
<i>Fixed line phone</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Mobile phone</i>	9.0	2.4	14.4	1.8	3.0	12.2
<i>Radio set</i>	63.0	3.3	65.6	59.7	53.7	68.2
<i>Television set</i>	1.9	0.6	3.1	0.3	2.1	1.8

Employment						
Employer in the main job						
<i>Civil service</i>	1.2	0.6	2.0	0.3	0.0	2.2
<i>Other public serve</i>	0.1	0.1	0.2	0.0	0.0	0.2
<i>Parastatal</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>NGO</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Private sector formal</i>	2.0	0.6	3.6	0.1	2.6	1.5
<i>Private sector informal</i>	45.7	1.6	43.9	48.0	41.7	48.8
<i>Household</i>	46.7	1.6	44.9	49.0	50.6	43.8
Activity in the main job						
<i>Agriculture</i>	68.4	2.9	62.7	75.3	65.5	70.6
<i>Mining/quarrying</i>	0.1	0.1	0.2	0.0	0.0	0.2
<i>Manufacturing</i>	0.2	0.2	0.3	0.0	0.4	0.0
<i>Services</i>	0.5	0.2	0.5	0.5	0.7	0.3
Employment Status in last 7 days						
<i>Unemployed (age 15-24)</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Male</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Female</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Unemployed (age 15 and above)</i>	0.1	0.1	0.0	0.2	0.2	0.0
<i>Male</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Female</i>	0.1	0.1	0.0	0.3	0.3	0.0
<i>Underemployed (age 15 and above)</i>	25.5	2.0	27.0	23.7	25.8	25.3
<i>Male</i>	31.6	2.5	31.0	32.3	29.0	33.7
<i>Female</i>	19.9	2.5	23.4	15.7	22.8	17.8
Education						
Adult literacy rate						
<i>Total</i>	75.8	2.2	78.8	72.2	74.8	76.5
<i>Male</i>	84.7	1.9	86.8	82.2	81.5	87.1
<i>Female</i>	67.6	2.6	71.5	62.8	68.4	67.0
Youth literacy rate (age 15-24)						
<i>Total</i>	88.7	2.3	90.2	87.0	86.5	90.7
<i>Male</i>	90.7	2.5	92.3	88.9	87.3	94.4
<i>Female</i>	86.4	2.6	87.8	84.8	85.4	87.1
Primary school						
<i>Access to School</i>	74.1	4.7	81.2	64.5	71.6	76.9
<i>Primary Gross Enrollment</i>	133.1	3.7	131.9	134.7	134.3	131.8
<i>Male</i>	146.6	5.9	143.0	151.2	155.4	137.8
<i>Female</i>	120.2	3.3	121.7	118.0	115.9	125.4
<i>Primary Net Enrollment</i>	88.4	1.9	90.3	85.8	86.3	90.7
<i>Male</i>	89.3	1.9	92.9	84.7	88.4	90.2
<i>Female</i>	87.5	2.4	87.9	86.9	84.5	91.1
<i>Satisfaction</i>	48.8	3.6	47.3	50.7	48.2	49.5
<i>Primary completion rate</i>	7.5	1.2	6.3	9.1	6.4	8.7
Secondary school						
<i>Access to School</i>	30.5	7.5	27.9	33.6	28.5	32.8
<i>Secondary Gross Enrollment</i>	16.6	2.6	18.8	14.1	7.5	26.9
<i>Male</i>	18.1	3.3	20.8	15.2	9.9	31.0
<i>Female</i>	14.7	3.3	16.4	12.4	3.0	23.3
<i>Secondary Net Enrollment</i>	11.3	2.0	13.8	8.5	5.4	18.0
<i>Male</i>	8.7	2.3	11.6	5.7	6.7	11.9
<i>Female</i>	14.7	3.3	16.4	12.4	3.0	23.3
<i>Satisfaction</i>	51.1	8.5	51.3	50.8	58.3	48.8
<i>Secondary completion rate</i>	0.7	0.7	1.3	0.0	0.0	1.5

Medical services							
<i>Health access</i>	36.8	7.1	53.7	15.9	28.7	44.3	
<i>Need</i>	32.4	1.4	29.3	36.2	34.6	30.4	
<i>Use</i>	33.0	1.3	30.1	36.6	36.6	29.6	
<i>Satisfaction</i>	72.4	2.5	76.0	68.8	75.5	69.0	
<i>Consulted traditional healer</i>	7.1	1.1	6.4	7.8	7.3	6.8	
<i>Pre-natal care</i>	95.3	2.0	98.2	92.5	94.6	96.2	
<i>Anti-malaria measures used</i>	77.3	3.8	77.9	76.4	78.3	76.7	
<i>Person has physical/mental challenge</i>	1.1	0.2	1.0	1.3	1.1	1.2	
Child welfare and health							
Orphanhood (children under 18)							
<i>Both parents dead</i>	0.7	0.3	1.1	0.3	0.7	0.8	
<i>Father only</i>	10.9	1.4	13.9	7.1	11.9	9.7	
<i>Mother only</i>	2.9	0.7	3.3	2.3	2.5	3.3	
Fostering (children under 18)							
<i>Both parents absent</i>	15.0	1.8	17.1	12.4	11.9	18.6	
<i>Father only absent</i>	17.3	1.9	21.1	12.6	18.9	15.6	
<i>Mother only absent</i>	4.6	1.0	5.2	3.8	3.8	5.5	
Children under 5							
<i>Delivery by health professionals</i>	37.0	3.8	43.3	29.1	29.8	45.5	
<i>Measles immunization</i>	71.5	2.3	71.6	71.3	68.7	74.8	
<i>Fully vaccinated</i>	51.1	3.8	56.8	44.0	47.1	55.8	
<i>Not vaccinated</i>	11.4	2.5	13.3	9.1	13.2	9.3	
<i>Stunted</i>	25.1	2.1	24.9	25.3	28.8	20.5	
<i>Wasted</i>	0.5	0.3	0.0	1.0	0.5	0.5	
<i>Underweight</i>	12.7	2.2	13.8	11.2	13.0	12.3	

* 1.96 times the Standard Error

1 INTRODUCTION

1.1 The Musoma DC CWIQ

This report presents district level analysis of data collected in the Musoma DC 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.

Although beyond the purpose of this report, the results of Musoma CWIQ could also be set against those of other CWIQ surveys that have been implemented at the time of writing in other districts in Tanzania: Bahi DC, Bariadi DC, Bukoba DC, Bukombe DC, Bunda DC, Dodoma MC, Hanang DC, Karagwe DC, Kasulu DC, Kibondo DC, Kigoma DC, Kilosa DC, Kishapu DC, Korogwe DC, Kyela DC, Ludewa DC, Makete DC, Maswa DC, Meatu DC, Kahama DC, Mbulu DC, Morogoro DC, Mpwapwa DC, Muheza 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 Musoma DC 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. 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 ensure that the final dataset is of the highest quality.

Table 1.1 Variables Used to Predict Consumption Expenditure in Mara Region

<i>Basic Variables</i>	<i>Household Assets</i>
Age of the household head	Ownership of a bicycle
Household size	Ownership of an iron
Level of education of the household head	Ownership of a watch or clock
Main source of income	Ownership of a motorised vehicle
Main activity of the household head	Main material in the roof
	Main material in the walls
	Main material in the floor
<i>Household Amenities</i>	Landholding
Fuel used for cooking	

Source: HBS 2000/2001 for Mara Region

Table 1.2 : Predicted and Observed Poverty Rates, Mara Region, 2000/01

Predicted	Observed		
	Non-Poor	Poor	Total
Non-Poor	51.4	9.8	61.2
Poor	12.8	26.0	38.8
Total	64.2	35.8	100.0

Source: HBS 2000/01 for Mara Region

1.3 Constructed variables to disaggregate

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 Mara region to ensure that the model developed accurately represents Musoma district.

Some caveats are in order when tabulating variables used as poverty predictors on poverty status. Poverty status is defined as a weighted average of the poverty predictors; hence it should come as no surprise that poverty predictors are correlated to them. For instance, education of the household head is one of the variables included in the equation used to calculate household consumption. The relationship is set as a positive one, consequently when observing the patterns in the data this relationship may be positive by construction. Table 1.1 lists the variables that have been used to calculate predicted household consumption expenditure.

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 needs¹.

The Musoma 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 12.8 percent of the cases, and vice versa in 9.8 percent of the households. This gives an overall percentage of correct predictions of 77.4 percent.

When the model is applied to the CWIQ data for Musoma 2006, the estimated population living in poverty is 36 percent, very much consistent with the 36 percent of poverty obtained from the HBS for Mara Region.

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.

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'.

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 Musoma 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 1.3 shows that the poverty rates differ by cluster location: households in accessible villages are less likely to be poor than households in more villages. Whereas the poverty rate in remote villages is 14 percent, the figure for accessible villages is 45 percent of the households.

1.3.3 Socio-economic Group

The socio-economic group that a household belongs to depends on the

Table 1.3: Cluster Location

Cluster Location	Median Time (in minutes) to:			Poverty Rate	Estimated Number of Households
	District Capital	All-Weather Road	Public Transport		
Accessible	30.0	15.0	180.0	49.4	24,570
Remote	10.0	10.0	120.0	25.4	33,180

Source: CWIQ 2006 Musoma DC

1 Introduction

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

Socio-Economic Group	Poverty Rate	Percentage Living in	
		Remote Clusters	Accessible Clusters
Employees	22.6	74.1	25.9
Self-Employed Agriculture	37.5	54.1	45.9
Self-Employed Other	34.7	57.9	42.1
Other	27.8	79.8	20.2

Source: CWIQ 2006 Musoma DC

Table 1.5: Socio-economic Group of the Household and Gender of the

Socio-economic Group	Household Head		
	Male	Female	Total
Employees	84.8	15.2	100.0
Self-Employed Agricultur	76.1	23.9	100.0
Self-Employed Other	85.6	14.4	100.0
Other	67.2	32.8	100.0
Total	77.8	22.2	100.0

Source: CWIQ 2006 Musoma DC

employment of its main income earner. Throughout the report households where the main income earner is employed in the private sectors, formally or informally, as well as Government and Parasitical employees are categorised as 'Employee'. 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 (e.g. domestic workers) 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 where the main income earner is self-employed, either in agriculture or in non-agricultural activities. In contrast, households in the category 'employee' have the lowest poverty rate at 23 percent. Employees and 'other' are the most likely to be located in remote villages, whereas households in the remaining socio-economic groups have higher shares in accessible villages than the former.

The composition of the socio-economic groups by gender of the household head is shown in Table 1.5. 78 percent of the households in the district are headed by a male. 85 percent of the households where the main income earner is an employee or

self-employed in non agricultural activities are headed by males. The share of female household heads is highest in the 'other' category at 33 percent.

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 roughly 3 out of 4 household heads are dedicated. In 91 percent of the households from the employee category the household head is dedicated to mining, manufacturing, energy or construction. Household heads from the 'self-employed agriculture' category are mostly dedicated to agriculture (97 percent). Similarly, the self-employed in non-agricultural activities are almost fully dedicated to services (93 percent). Finally, household heads from the 'other' category are mostly concentrated in agriculture (91 percent).

Table 1.6: Socio-economic Group of the Household and Main Economic Activity of the Household Head

	Agriculture	Mining Manufacturing Energy Construction	Private and Public Services	Household Duties	Other	Total
Socio-economic Group						
Employees	8.6	91.4	0.0	0.0	0.0	100.0
Self-Employed Agric	97.1	0.4	1.5	1.0	0.0	100.0
Self-Employed Other	6.5	0.0	92.6	0.9	0.0	100.0
Other	90.7	0.0	0.0	9.3	0.0	100.0
Total	74.6	5.1	18.9	1.4	0.0	100.0

1 Introduction

2 VILLAGE, POPULATION AND HOUSEHOLD CHARACTERISTICS

2.1 Introduction

This chapter provides an overview of the Musoma 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.

2.2 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, 6 percent of the population is over 60 years old, whereas 50 percent is under 15 years old. The remaining 44 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. Poor households report higher a higher share than non-poor households in the 0-14 cohort and lower shares in the rest.

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 (1.4) than non-poor households (1.0).

The dependency ratio increases with the number of household members, from 0.2 for households with 1 or 2 members, to 1.4 for households with 7 or more members. The breakdown by socio-economic group of the household shows that the 'other' group has the highest dependency ratio (1.6), whereas the employees have 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 5.7 individuals. Households with at most two individuals only represent 11 percent of all households in the district. The figure for households with 7 or more members is 37 percent.

The breakdown by cluster location shows that households in remote villages tend to be larger than households in accessible villages, with means of 5.9 and 5.5 members, respectively. The difference by poverty status is more pronounced, with

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	25.2	21.0	3.3	49.5	24.3	23.4	2.9	50.5	49.5	44.4	6.2	100.0
Cluster Location												
Accessible	24.7	20.9	2.9	48.6	25.4	22.9	3.1	51.4	50.1	43.9	6.0	100.0
Remote	25.8	21.1	3.8	50.6	22.9	23.9	2.6	49.4	48.7	45.0	6.4	100.0
Poverty Status												
Poor	28.3	20.3	1.7	50.3	27.0	21.0	1.7	49.7	55.2	41.3	3.5	100.0
Non-poor	22.4	21.7	4.7	48.8	21.8	25.5	4.0	51.2	44.1	47.2	8.7	100.0

Source :CWIQ 2006 Musoma DC

2 Village, population and households 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	1.8	2.8	2.6	0.2	5.7	1.2
Cluster Location							
Accessible	1.0	1.8	2.8	2.5	0.3	5.5	1.2
Remote	1.1	1.8	2.9	2.8	0.2	5.9	1.1
Poverty Status							
Poor	1.6	2.7	4.2	3.3	0.2	7.7	1.4
Non-poor	0.7	1.3	2.0	2.3	0.3	4.6	1.0
Household size							
1-2	0.0	0.1	0.1	1.4	0.2	1.8	0.2
3-4	0.7	0.8	1.4	1.9	0.2	3.5	0.9
5-6	1.0	1.8	2.8	2.5	0.3	5.5	1.2
7+	1.6	3.0	4.7	3.6	0.3	8.6	1.4
Socio-economic Group							
Employee	0.7	1.8	2.5	3.0	0.1	5.6	0.9
Self-employed - agric	1.1	1.9	2.9	2.6	0.2	5.8	1.2
Self-employed - other	1.0	1.5	2.4	2.6	0.2	5.3	1.0
Other	0.8	1.9	2.7	2.1	0.6	5.5	1.6
Gender of Household Head							
Male	1.1	1.8	2.9	2.7	0.3	5.9	1.2
Female	0.8	1.6	2.5	2.3	0.2	4.9	1.2

Source :CWIQ 2006 Musoma 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	11.4	26.2	25.9	36.5	100.0	5.7
Cluster Location						
Accessible	12.7	27.1	24.2	36.0	100.0	5.5
Remote	9.6	25.0	28.1	37.3	100.0	5.9
Poverty Status						
Poor	0.0	5.7	23.0	71.3	100.0	7.7
Non-poor	17.7	37.5	27.5	17.3	100.0	4.6
Socio-economic Group						
Employed	15.8	26.4	18.1	39.7	100.0	5.6
Self-employed - agriculture	9.6	24.3	27.5	38.6	100.0	5.8
Self-employed - other	15.0	31.8	22.7	30.5	100.0	5.3
Other	16.4	30.1	24.5	28.9	100.0	5.5
Gender of Household Head						
Male	9.0	24.3	28.0	38.7	100.0	5.9
Female	19.6	32.9	18.7	28.8	100.0	4.9

Source :CWIQ 2006 Musoma DC

poor households reporting a mean household size of 7.7 members, and non-poor households reporting 4.6.

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 5.9 members in average, whereas the latter have only 4.9 members.

This difference partly owes to the fact that, as shown in Section 2.4, female household heads rarely have a spouse.

2.3 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 cluster location. However, the analysis

by poverty status shows that the shares of 'child' and 'other relative' are higher in poor households, whereas non-poor households report higher shares of 'head' and 'spouse'.

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 the age of 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 28 and 8 percent, respectively. In turn, females are more likely to be spouses to the household head than males, at rates of 27 and 1 percent, respectively.

Table 2.5 shows the percent distribution of the population age 12 and above by marital status. Overall, 39 percent of the population has never been married. In addition, 31 percent is married and monogamous, and 13 percent is married and polygamous. Despite less than 1 percent being 'officially' divorced, 5 percent of the population is 'unofficially' separated. Informal unions constitute 6 percent of the population and 7 percent is widowed.

There are no remarkable differences by cluster location. However, members of

poor households are more likely to have never been married, whereas members of non-poor households are more likely to be in a monogamous marriage.

The age breakdown shows that the 'polygamous-married' category peaks at the 50-59 groups, at 30 percent. For the population after 25 years old, married-monogamous is the most common category. Neither divorced nor separated show a trend but, widowed increases with age. 'Never married' also shows correlation with age, decreasing as the population gets older.

Around 48 percent of the men have never been married, but for women the figure is only 31 percent. While 13 percent of women are widowed and 8 percent separated, only 1 percent of men falls in each of these categories.

Table 2.6 shows the percent distribution of the population age 5 and above by socio-economic group. Overall, 21 percent of the population is self-employed in agriculture, with 71 percent in other activities (household workers, unemployed, inactive). Individuals living in remote villages seem to be somewhat more likely to be self-employed in agriculture, as non-poor households. Members of poor households are also more likely belong to the 'other' category.

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

	Head	Spouse	Child	Parents	Other relative	Not related	Total
Total	17.6	13.9	49.5	1.0	17.8	0.3	100.0
Cluster Location							
Accessible	18.1	13.5	49.1	1.0	18.3	0.2	100.0
Remote	17.0	14.5	50.0	1.0	17.1	0.4	100.0
Poverty Status							
Poor	13.0	11.0	55.5	1.1	19.0	0.3	100.0
Non-poor	21.8	16.6	43.9	0.8	16.6	0.2	100.0
Age							
0- 9	0.0	0.0	72.9	0.0	26.8	0.4	100.0
10-19	0.0	2.1	74.8	0.0	23.0	0.1	100.0
20-29	17.9	32.7	34.7	0.0	14.4	0.3	100.0
30-39	42.0	43.2	11.2	0.0	3.7	0.0	100.0
40-49	57.4	36.3	4.1	0.5	1.7	0.0	100.0
50-59	63.7	27.5	0.0	4.7	4.1	0.0	100.0
60 and above	65.9	15.1	0.0	12.0	5.9	1.1	100.0
Gender							
Male	27.7	0.9	54.1	0.2	17.2	0.0	100.0
Female	7.7	26.7	45.0	1.7	18.3	0.5	100.0

Source :CWIQ 2006 Musoma DC

2 Village, population and households characteristics

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

	Never married	Married monog	Married polyg	Informal, loose union	Divorced	Separated	Widowed	Total
Total	39.1	31.2	12.5	5.6	0.1	4.6	6.9	100.0
Cluster Location								
Accessible	39.8	28.3	13.2	5.9	0.1	5.1	7.5	100.0
Remote	38.3	34.6	11.6	5.3	0.0	3.9	6.1	100.0
Poverty Status								
Poor	44.1	26.8	12.0	5.6	0.0	4.3	7.2	100.0
Non-poor	35.3	34.6	12.8	5.7	0.1	4.8	6.7	100.0
Age								
12-14	99.3	0.7	0.0	0.0	0.0	0.0	0.0	100.0
15-19	91.2	6.3	0.4	1.3	0.0	0.8	0.0	100.0
20-24	46.5	39.7	3.7	4.3	0.0	3.5	2.3	100.0
25-29	16.7	57.5	10.4	8.0	0.0	6.9	0.5	100.0
30-39	6.2	46.2	23.0	9.8	0.0	9.9	4.9	100.0
40-49	1.3	49.4	22.2	8.9	0.6	6.4	11.2	100.0
50-59	1.2	35.8	29.8	6.6	0.0	7.3	19.4	100.0
60 and above	0.0	33.6	23.0	9.3	0.0	4.2	29.8	100.0
Gender								
Male	48.2	32.1	12.3	5.8	0.0	1.0	0.6	100.0
Female	30.5	30.3	12.6	5.5	0.2	7.9	12.9	100.0

Source :CWIQ 2006 Musoma DC

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

	Employee	Self-employed Agriculture	Self-employed Other	Other	Total
Total	1.5	21.4	6.4	70.7	100.0
Cluster Location					
Accessible	2.2	18.5	8.5	70.8	100.0
Remote	0.7	24.9	3.8	70.6	100.0
Poverty Status					
Poor	0.9	18.1	5.7	75.3	100.0
Non-poor	2.0	24.2	7.0	66.7	100.0
Age					
5- 9	0.0	0.0	0.2	99.8	100.0
10-14	0.0	0.4	0.5	99.1	100.0
15-19	1.4	2.0	2.2	94.4	100.0
20-29	2.2	25.6	14.0	58.3	100.0
30-39	2.8	41.2	16.1	39.9	100.0
40-49	3.8	58.9	12.0	25.3	100.0
50-59	3.7	59.6	6.1	30.6	100.0
60 and above	1.7	45.9	5.0	47.4	100.0
Gender					
Male	2.4	25.5	10.5	61.6	100.0
Female	0.6	17.4	2.4	79.5	100.0

Source :CWIQ 2006 Musoma DC

The analysis of the age-groups is particularly interesting. The share of self-employed in agriculture increases with age, peaking at roughly 60 percent for the 40-49 and 50-59 groups. The category 'other' decreases steadily with age, showing a sharp decrease between 15-19 and 20-29, roughly from 95 to 60 percent, then decreases steadily until 25 percent for the population between 40 and 49, and

increases again, reaching 47 percent of the population aged 60 and above. The share of self-employed in non agricultural activities is higher for the cohorts between aged 20 and 49, ranging from 12 to 16 percent.

The gender breakdown shows that males are more likely to be self-employed than women. In turn, females are more likely to be in the 'other' category, with a share of 80 percent against 62 percent for the males.

Table 2.7 shows the percent distribution of the total population aged 5 and above by highest level of education. One quarter of the population has no formal education. Almost 40 percent has at most some primary, and roughly 30 percent has completed primary.

The breakdown by cluster location shows that individuals from remote villages are more likely to have no formal education than individuals from accessible villages, at 28 and 22 percent.

The breakdown by poverty status shows that poor households report a higher share of 'some primary' and a lower share of 'completed primary' than non-poor households.

The age breakdown shows that 61 percent of the children between 5 and 9 have no formal education, but 93 percent of the

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	24.6	3.0	38.9	29.4	2.8	0.1	1.2	100.0
Cluster Location								
Accessible	22.0	3.3	39.2	30.1	3.6	0.2	1.6	100.0
Remote	27.9	2.6	38.4	28.7	1.7	0.0	0.9	100.0
Poverty Status								
Poor	26.5	3.3	42.3	26.0	1.4	0.0	0.5	100.0
Non-poor	23.0	2.7	35.9	32.5	3.9	0.2	1.9	100.0
Age								
5- 9	60.6	14.0	25.4	0.0	0.0	0.0	0.0	100.0
10-14	4.1	1.6	93.3	0.9	0.2	0.0	0.0	100.0
15-19	4.1	0.0	57.9	30.8	6.9	0.0	0.3	100.0
20-29	11.2	0.0	14.7	64.6	7.3	0.7	1.4	100.0
30-39	10.8	0.0	12.4	73.2	3.5	0.0	0.0	100.0
40-49	25.2	0.7	16.3	51.6	2.0	0.0	4.2	100.0
50-59	39.4	0.0	29.2	26.8	1.6	0.0	2.9	100.0
60 and above	60.4	0.0	29.2	4.2	0.4	0.0	5.8	100.0
Gender								
Male	20.6	2.6	42.9	28.5	3.5	0.2	1.7	100.0
Female	28.5	3.4	35.0	30.3	2.0	0.0	0.8	100.0

Source :CWIQ 2006 Musoma DC

children 10-14 have at least some primary. Rates of no education are lowest for the population 10-19 (4 percent for each group) and higher for the older groups. In the groups between 20 and 49 years old, the most common category is completed primary.

The gender breakdown shows that females have a higher share of uneducated population than males: 29 against 21 percent, but at the same time similar shares with complete primary (close to 30 percent).

2.4 Main Characteristics of the Heads of Household

Table 2.8 shows the percent distribution of household heads by marital status. Overall, 48 percent of the household heads is married and monogamous, 21 divorced, separated or widowed, 21 percent married and polygamous, 1 percent has never been married and 10 and lives 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 'married monogamous' category, in accessible villages they report a higher share in divorced, separated or widowed.

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 polygamous marriages or informal unions.

Analysis by age-groups shows that married-monogamous is the category with the highest share of household heads over 20 years old. The married-monogamous category decreases with age, as 'divorced/separated or widowed' and married-polygamous increase.

Most female household heads are divorced, separated or widowed (87 percent), whereas for males, this category just represents 2 percent. Most male household heads are married, monogamous or polygamous (87 percent, against 6 percent of female household heads).

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 is 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 70 percent. The self-employed in non-agricultural activities represent 19 percent of the household heads, the 'other'

2 Village, population and households characteristics

category (unemployed, inactive and household workers) represents 6 percent, and the employees are 5 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

79 and 62 percent, respectively. In accessible villages, household heads are more likely to belong to the 'self-employed other' group than heads of households in remote villages, with shares of 24 and 13 percent, respectively. Heads of poor households belong to the 'self-employed agriculture' group more frequently than non-poor households.

The breakdown by age of the household head shows interesting insights. For all age-groups, 'self-employed agriculture' is the most important category, representing at least 3 out of 5 household heads in each age-group. The 'employee' category peaks at 8 percent for the group aged from 20 to 29. The 'self-employed – other' category starts at 34 percent for the 20-29 group and then decreases steadily down to 10 percent for the cohort aged 60 and above. The 'other' category gains importance in the latter group, with a share 16 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 self-employed in non-agricultural activities than in female-headed households. In the latter, the main income earner is more likely to be self-employed in agriculture.

Table 2.10 shows the percent distribution of the heads of household by highest level of education. Overall, around only 7 percent of the household heads has any education after primary. One quarter of the household heads has no education, 22 percent some primary and 47 percent have completed primary.

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	0.9	47.9	20.6	9.5	21.1	100.0
Cluster Location						
Accessible	1.3	42.7	21.1	9.5	25.5	100.0
Remote	0.5	54.7	20.0	9.5	15.3	100.0
Poverty Status						
Poor	0.5	46.3	24.1	11.3	17.8	100.0
Non-poor	1.2	48.7	18.7	8.5	22.9	100.0
Age						
15-19	0.0	0.0	0.0	0.0	0.0	0.0
20-29	3.8	73.4	4.8	10.6	7.5	100.0
30-39	0.8	53.5	18.0	9.1	18.6	100.0
40-49	0.9	45.4	19.7	11.0	22.9	100.0
50-59	0.0	36.2	31.4	2.6	29.8	100.0
60 and above	0.0	37.7	26.4	12.1	23.8	100.0
Gender						
Male	0.6	59.7	26.5	10.9	2.3	100.0
Female	1.9	6.3	0.0	4.6	87.1	100.0

Source :CWIQ 2006 Musoma DC

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

	Employed	Self-employed Agriculture	Self-employed Other	Other	Total
Total	5.1	69.6	19.1	6.1	100.0
Cluster Location					
Accessible	7.1	62.3	23.8	6.9	100.0
Remote	2.6	79.4	13.0	5.1	100.0
Poverty Status					
Poor	3.2	73.3	18.7	4.8	100.0
Non-poor	6.2	67.6	19.4	6.8	100.0
Age					
15-19	0.0	0.0	0.0	0.0	0.0
20-29	7.4	59.1	33.5	0.0	100.0
30-39	6.6	61.6	30.2	1.6	100.0
40-49	4.9	71.7	17.2	6.3	100.0
50-59	5.0	86.2	5.9	2.9	100.0
60 and above	2.6	71.0	10.3	16.0	100.0
Gender					
Male	5.6	68.1	21.1	5.3	100.0
Female	3.5	75.0	12.4	9.0	100.0

Source :CWIQ 2006 Musoma 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	25.3	21.6	46.7	2.8	0.0	3.6	100.0
Cluster Location							
Accessible	21.3	21.9	48.1	4.3	0.0	4.4	100.0
Remote	30.7	21.3	44.7	0.9	0.0	2.4	100.0
Poverty Status							
Poor	28.7	22.2	48.5	0.0	0.0	0.6	100.0
Non-poor	23.5	21.3	45.7	4.4	0.0	5.2	100.0
Age							
15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-29	11.1	18.6	63.9	4.3	0.0	2.0	100.0
30-39	11.5	12.1	72.2	4.2	0.0	0.0	100.0
40-49	24.1	12.5	54.9	2.9	0.0	5.6	100.0
50-59	27.7	28.7	39.6	2.5	0.0	1.6	100.0
60 and above	47.4	38.4	6.4	0.6	0.0	7.2	100.0
Gender							
Male	17.4	22.7	52.3	3.0	0.0	4.6	100.0
Female	53.3	17.7	26.8	2.2	0.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

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 31 and 21 percent, respectively. In turn, household heads in accessible villages are more likely to have complete primary education, at 48 percent compared to 45 percent of household heads in accessible 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 29 percent of heads of poor households has no education, the share for non-poor is 24 percent. In the other extreme, whereas 9 percent of non-poor household heads has post-secondary studies, the share for poor household heads is only 1 percent.

The age breakdown shows that 47 percent of household heads in the 60+ cohort has no education, and a further 38 percent just some primary. Completed primary represents between 55 and 72 percent for the groups between 20 and 49; but only 40 percent in the 50-59 cohort, 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 53 and 17 percent, respectively. Half the male

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	2.9	10.9	0.7
Cluster Location			
Accessible	3.3	13.9	1.1
Remote	2.3	7.1	0.3
Poverty Status			
Poor	2.5	11.9	0.7
Non-poor	3.3	9.7	0.8
Age			
0-4	0.8	5.1	0.0
5-9	3.8	7.6	0.6
10-14	3.8	17.6	1.7
15-17	4.3	18.5	0.6
Gender			
Male	3.6	11.2	0.8
Female	2.1	10.5	0.6

Source :CWIQ 2006 Musoma DC

household heads has completed primary, against 27 percent of females.

2.5 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, 3 percent lost their mother only and 11 percent lost their father only. This adds up to 15 percent of all children under 18.

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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 37 percent of children under 18 were living in non-nuclear households at the time of the survey.

Overall, 43 percent the children from accessible clusters live in non-nuclear households. In turn, children from non-poor households tend to live in non-nuclear households more often than children from poor households (with shares of 40 and 35 percent, 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. 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			
	Children living with mother only	with father only	Children living with no parents	Children living in non-nuclear households
Total	17.3	4.6	15.0	37.0
Cluster Location				
Accessible	21.1	5.2	17.1	43.4
Remote	12.6	3.8	12.4	28.9
Poverty Status				
Poor	18.9	3.8	11.9	34.6
Non-poor	15.6	5.5	18.6	39.7
Age				
0-4	16.3	1.5	10.0	27.8
5-9	16.5	6.3	15.7	38.5
10-14	19.0	5.5	19.6	44.0
15-17	18.5	7.3	16.2	42.0
Gender				
Male	16.8	5.6	14.2	36.6
Female	17.9	3.5	16.0	37.4

Source :CWIQ 2006 Musoma DC

3 EDUCATION

This chapter examines selected education indicators in Musoma 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. The adult literacy rate¹ is 76 percent. Literacy rates differ between accessible and remote villages at 79 and 72 percent respectively.

The breakdown of socio-economic groups of the households shows that literacy rates are higher among the employees (96 percent), than in the remaining categories.

The gender breakdown shows an important literacy rate gap between men and women. The literacy rate among men is 17 percentage points higher than that of women at 85 percent and 68 percent respectively.

Poverty status, orphan status and foster status do not show strong correlation with literacy rates.

¹ The Adult literacy rate is defined for the population aged 15 and over.

3.1.2 Primary School Access, Enrolment and Satisfaction

Access

Primary school access rate is defined as the proportion of primary school-age children (7 to 13 years) reporting to live within 30 minutes of the nearest primary school. Nearly three quarters (74 percent) of primary school-age children live within 30 minutes of a primary school. Primary school access is significantly higher in accessible clusters than in remote clusters, at 81 and 65 percent respectively.

More than three quarters (77 percent) of the children aged 7 to 13 living in non-poor households live within 30 minutes of the nearest primary school compared to 72 percent of those living in poor households.

The breakdown by socio-economic group shows that 87 percent of children living in households belonging to the 'employee' category live within 30 minutes of the nearest primary school compared to 65 percent of the children living in households belonging to the 'other' socio-economic group.

Non-orphaned children have a higher access rate to primary schools than orphaned, at 75 and 70 percent respectively. However, the converse is observed for fostered children. 79 percent of fostered children have access to primary schools, whereas the rate for non-fostered is 72 percent.

Enrolment

The two main measures of enrolment, the Gross Enrolment Rate (GER) and the Net Enrolment Rate (NER) are analysed in this section. GER is defined as the ratio of all individuals attending school, irrespective of their age, to the population of school-age children. If there is a large proportion of non-school-age individuals attending school, the GER may exceed 100 percent. Primary school GER informs on the ratio of all

3 Education

Table 3.1: Education indicators

	Adult Literacy rate	Primary				Secondary			
		access	gross enrollment	net enrollment	satisfaction	access	gross enrollment	net enrollment	satisfaction
Total	75.8	74.1	133.1	88.4	48.8	15.5	16.6	11.3	51.1
Cluster Location									
Accessible	78.8	81.2	131.9	90.3	47.3	11.8	18.8	13.8	51.3
Remote	72.2	64.5	134.7	85.8	50.7	19.8	14.1	8.5	50.8
Poverty Status									
Poor	74.8	71.6	134.3	86.3	48.2	15.8	7.5	5.4	58.3
Non-poor	76.5	76.9	131.8	90.7	49.5	15.1	26.9	18.0	48.8
Socio-economic Group									
Employee	95.8	86.6	137.1	91.7	70.4	26.7	54.7	47.1	25.0
Self-Employee - agric	73.6	72.5	135.7	87.7	46.7	10.3	12.4	6.9	51.2
Self-Employee - other	82.4	81.1	129.6	90.4	38.6	39.5	11.5	11.5	87.8
Other	61.5	64.6	111.3	88.0	80.4	0.0	30.6	15.3	100.0
Gender									
Male	84.7	73.6	146.6	89.3	50.7	15.5	18.1	8.7	57.5
Female	67.6	74.6	120.2	87.5	46.6	15.5	14.7	14.7	41.1
Orphan status									
Orphaned	93.1	70.2	147.9	89.2	40.4	12.4	10.1	10.1	72.2
Not-orphaned	95.2	75.3	126.6	88.2	51.5	15.7	12.9	12.9	37.9
Foster status									
Fostered	96.1	78.6	124.6	90.8	57.0	16.3	2.9	2.9	100.0
Not-fostered	95.1	72.4	131.3	87.9	48.5	13.4	14.6	14.6	44.5

Source: CWIQ 2006 Musoma 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.

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

The NER provides more information for analysis than the GER. While trends in the actual participation of school-age children in formal education are in part captured by the NER, the GER, at best provides a broad indication of general participation in education and of the capacity of the schools. The GER gives

no precise information regarding the proportions of individuals of school and non-school-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 GER was 133 percent at the time of the survey. This figure indicates that all individuals who were at primary school constitute 133 percent of all children of primary school-age in the district. The NER further shows that 88 percent of all primary school-age children were attending school.

While the GER does not vary by cluster location, the NER for clusters located in the accessible areas is 4 percentage

points higher than that of clusters located in remote areas. Similarly, primary school GER does not vary much by poverty status. However, the NER for children living in non-poor households is 5 percentage points higher than that of those living in poor households.

GER is highest among people living in households belonging to the 'employee' and 'self-employed agriculture' socio-economic groups, and lowest for the 'other' socio-economic group. On the other hand, NER is highest for the employees and lowest for the 'self-employed agriculture and, for the 'other' categories, at 88 percent.

Furthermore, the gender breakdown shows that males have higher GER and NER than females.

Surprisingly, the breakdown by orphan

status shows higher GER and NER for orphaned children. The same happens with fostered children. However, the small sample size in the orphan and foster categories (see chapter 2) must be kept in mind.

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.

Almost a half (49 percent) of all primary school pupils were satisfied with the schools they were attending. While there is no significant difference in satisfaction rates between pupils living in poor and non-poor households, a higher share of

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	Facilities in bad condition	High fees	Other
Total	50.0	29.9	23.8	51.3	4.1	29.7	51.1	1.8	1.4
Cluster Location									
Accessible	51.4	36.6	20.9	43.7	3.5	34.5	54.8	3.1	1.6
Remote	48.2	20.3	28.1	62.3	4.9	22.5	45.7	0.0	1.1
Poverty Status									
Poor	51.1	20.9	23.8	49.9	5.6	29.0	51.6	1.1	0.0
Non-poor	49.0	39.5	23.9	52.7	2.4	30.4	50.6	2.6	2.9
Socio-economic Group									
Employee	43.0	63.2	9.6	32.7	0.0	13.1	27.6	12.7	0.0
Self-employed - agric	51.8	27.3	26.1	53.7	3.1	32.8	50.4	0.0	1.1
Self-employed - other	57.9	33.3	14.2	44.0	10.2	22.4	56.7	5.8	3.6
Other	18.8	0.0	65.4	78.8	0.0	29.7	91.5	0.0	0.0
Gender									
Male	47.7	30.4	23.9	53.5	3.2	28.1	48.5	2.1	0.8
Female	52.9	29.4	23.8	48.8	5.0	31.3	53.9	1.5	2.1
Type of school									
Primary	51.2	29.6	25.6	49.8	4.7	31.4	52.3	0.5	1.6
Government	50.9	29.2	25.9	50.3	4.7	31.8	52.6	0.3	1.4
Private	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	100.0	73.8	0.0	0.0	0.0	0.0	26.2	26.2	26.2
Secondary	48.9	54.4	9.4	77.1	0.0	4.4	21.6	7.6	0.0
Government	50.6	45.4	11.3	86.9	0.0	5.3	25.9	0.0	0.0
Private	100.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Other	27.8	100.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0
Other	39.8	10.7	15.8	45.3	0.0	31.6	63.7	12.2	0.0
Government	45.1	7.6	18.4	52.6	0.0	36.7	67.7	4.8	0.0
Private	10.5	100.0	0.0	0.0	0.0	0.0	0.0	87.8	0.0
Other	45.8	0.0	0.0	0.0	0.0	0.0	54.6	45.4	0.0

Source: CWIQ 2006 Musoma DC

1. Base for column 1 is enrolled students. For columns 2 to 9, dissatisfied students

pupils living in remote clusters reported to be satisfied with their schools than those living in accessible clusters, at 51 and 47 percent respectively.

The breakdown by socio-economic group of the household shows that pupils living in households belonging to the 'other' category have a higher rate of satisfaction with their primary schools compared to the pupils living in households belonging to the 'self-employed other' category, at 80 and 39 percent respectively.

Furthermore, 51 percent of pupils living in male-headed households reported to be satisfied with their primary schools compared to 47 percent of pupils living in female-headed households.

While 52 percent of non-orphaned children report to be satisfied with the primary schools they attend, the share for orphaned children is 40 percent. In contrast the percentage of fostered children who report to be satisfied with their primary schools is higher than that of non-fostered, at 57 and 49 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 the nearest secondary school.

16 percent of all pupils in secondary school live within 30 minutes of the nearest secondary school. The difference in access to secondary school between people living in remote and accessible clusters is noticeable at 20 and 12 percent respectively. On the other hand, there is no significant difference in secondary access rates between pupils living in poor and non-poor households

The socio-economic status of the household seems to be strongly correlated with the secondary school access rate. While pupils living in households where the main income

earner is self-employed in non-agricultural activities have the highest rate of access to secondary school at 40 percent, followed by the employees (27 percent). The share for the 'other' category is virtually null.

The access rate for orphaned children is 12 percent, slightly lower than that for non-orphans, at 16 percent. Similarly, there is a minimal difference between fostered and non-fostered children, at 16 and 13 percent, respectively.

Enrolment

As explained before, Gross Enrolment Rate (GER) is defined as the ratio of all individuals attending school, irrespective of their age, to the population of school-age children while the Net Enrolment Rate (NER) is defined as the ratio of school-age children enrolled at school to the population of school-age children. The secondary school-age is between 14 and 19 years old.

The GER and NER at secondary school are very low compared to primary school level. Overall, GER was 17 percent and NER was 11 percent. The secondary school GER and NER for households located in accessible clusters are 5 percentage points higher than that of households located in remote clusters. Both secondary GER and NER are significantly higher in non-poor households than in poor households, with a noticeable difference of more than 13 percentage points.

The breakdown by socio-economic group of the household shows that 'employee' is the category with highest NER and GER, whereas the 'self-employed agriculture and 'self-employed other' are the categories with the lowest GER of 12 percent. It is also noticeable that the 'self-employed agriculture' category has the lowest NER of 7 percent.

Finally, the NER rate is 6 percentage points higher among females than among males. Although there seems to be no significant differences by orphan status, the difference between fostered and non-fostered children is remarkable, at 3 and 15 percent, respectively.

Satisfaction

49 percent of the total population enrolled in secondary schools is dissatisfied with their schools. 51 percent of this population reports to be satisfied with the secondary schools they attend. This satisfaction rate is not very different to that in primary schools (49 percent). The satisfaction rate is higher among people living in poor households than that of people living in non-poor households, at 58 and 49 percent respectively. In contrast, the satisfaction rate is the same among people living in households located in remote and accessible clusters at 51 percent.

The breakdown by socio-economic group shows that people living in households where the main income earner is an employee have the lowest satisfaction rate. Virtually all the children from the 'other' socio-economic group are satisfied with their schools.

The satisfaction rate for males is higher than that of females at 58 and 41 percent respectively.

Among the individuals enrolled in secondary schools, orphaned children

were more satisfied with their schools than non-orphaned children. The satisfaction rate for orphans is higher than that of non-orphans at 72 and 38 percent respectively. Similarly, all (100 percent) fostered children report to be satisfied with their secondary schools compared to 45 percent of non-fostered children.

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 are provided. To obtain this 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 condition of facilities. The results are shown in Table 3.2.

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

	Percent not attending	Completed school	Reasons not currently attending									
			Distance	Cost	Work	Illness	Pregnancy	Got married	Useless/uninteresting	Failed exam	Awaits admission	Dismissed
Total	8.1	31.4	0.0	13.9	3.9	6.6	0.0	23.2	10.8	35.0	0.0	1.5
Cluster Location												
Accessible	7.8	30.3	0.0	11.0	7.0	6.7	0.0	21.0	9.1	36.8	0.0	2.7
Remote	8.4	32.7	0.0	17.5	0.0	6.4	0.0	26.0	12.9	32.7	0.0	0.0
Poverty Status												
Poor	7.6	31.4	0.0	28.4	0.0	7.2	0.0	15.2	13.4	32.0	0.0	0.0
Non-poor	8.6	31.4	0.0	0.4	7.5	6.0	0.0	30.7	8.4	37.8	0.0	2.9
Socio-economic Group												
Employed	3.1	33.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	0.0	0.0
Self-employed - agric	9.0	34.9	0.0	13.9	4.9	8.3	0.0	21.4	11.6	34.3	0.0	1.9
Self-employed - other	7.8	18.7	0.0	8.5	0.0	0.0	0.0	29.6	10.7	32.5	0.0	0.0
Other	4.0	0.0	0.0	57.2	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Gender												
Male	5.6	18.9	0.0	30.4	0.0	13.8	0.0	0.0	19.2	47.9	0.0	0.0
Female	10.8	38.3	0.0	4.8	6.0	2.5	0.0	36.1	6.1	27.8	0.0	2.3
Age												
7-13	0.2	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
14-19	20.1	31.8	0.0	14.1	3.9	5.2	0.0	23.6	11.0	35.5	0.0	1.5

Source: CWIQ 2006 Musoma DC

1. Base for column 1 is school-age children. For columns 2 to 13, not enrolled school children

Table 3.4 Primary schools enrolment and and drop out rates by age and gender

	Net enrollment rates			Drop out rates		
	Male	Female	Total	Male	Female	Total
Total	89.3	87.5	88.4	0.0	0.0	0.0
7	42.1	59.7	53.2	0.0	0.0	0.0
8	84.5	83.7	84.1	0.0	0.0	0.0
9	94.5	97.6	95.9	0.0	0.0	0.0
10	98.2	96.2	97.3	0.0	0.0	0.0
11	97.0	94.7	95.8	0.0	0.0	0.0
12	98.1	96.1	97.2	0.0	0.0	0.0
13	97.2	95.9	96.5	0.0	0.0	0.0

Source: CWIQ 2006 Musoma DC

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

Overall, half (50 percent) the students who were enrolled in either primary or secondary school reported dissatisfaction with the schools they were attending. 51 percent of students reported lack of teachers and bad condition of facilities as the cause of their dissatisfaction. In addition, 30 percent reported dissatisfaction with their schools because of lack of books and supplies and lack of space, while 24 percent reported dissatisfaction with their schools due to poor teaching.

While cluster location and poverty status do not show strong correlation with the level of dissatisfaction, the dissatisfaction rate for people living in accessible villages due to lack of text books/supplies is about 17 percentage points higher than that of those living in remote villages. Similarly the dissatisfaction rate due to lack of text books/supplies among non-poor households is higher than that among poor households at 40 and 21 percent respectively.

The breakdown by socio-economic group shows that the dissatisfaction rates among households from the self-employed categories are the highest. At the same time the ‘other’ socio-economic group reported the lowest dissatisfaction rate. Dissatisfaction rate among female-headed households is higher than that among male-headed households at 53 and 48 percent respectively.

Those attending primary school report to be most dissatisfied due to facilities in bad condition (52 percent) followed by lack of teachers (50 percent) while those attending secondary schools report dissatisfaction due to lack of teachers (77

percent) followed by lack of text books and supplies (54 percent).

3.3 Non-attendance

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

The district has about 8 percent of 7 to 19 year olds who were not attending school. Around 35 percent of the non-attending population did not attend because they failed standard four, seven or form four exams. 31 percent reported that they had completed standard seven, O-level or A-level. About a quarter (23 percent) of respondents had gotten married. While 14 percent were not attending due to cost, 11 percent reported that school was useless or uninteresting. 7 percent were not attending school due to illness and none of the respondents reported non-attendance due to pregnancy or distance to schools.

Cluster location and poverty status do not show strong correlation with non attendance rates. However, while 26 percent of those living in remote clusters were not attending school due to marriage, the share for children in remote clusters was 21 percent. Likewise, 31 percent of children living in non-poor households were not attending school due to marriage compared to 15 percent of those living in poor households. It is also noticeable that while 28 percent of children living in poor households were not attending school due to costs, the

share for those living in non-poor households is virtually.

Virtually all primary school-aged children attend school, as their non-attendance rate is less than 1 percent. On the other hand, 80 percent of secondary school-aged individuals attend school. 36 percent of secondary school-aged individuals not attending secondary school reports having failed exams, while all (100 percent) of primary school-aged children not attending school reported illness.

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 / (enrolled children + children who dropped out)).

Primary school

Table 3.4 shows primary school net enrolment and drop-out rates. The drop-out rates at primary level are generally very low. Disaggregation of the data shows that at the time of the survey, the primary school drop-out rate was virtually null and therefore no solid statistical conclusions could be made. Therefore, only enrolment rates will be analysed.

Overall, 88 percent of primary school-aged children were enrolled at the time of the survey. Out of those in primary school-age (7 to 13 years), 88 percent of girls and 89 percent of boys were 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 53 percent of all seven year olds were enrolled. Children are most likely to be in school by ages 10 or 12, where the NER is about 97 percent.

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	8.7	14.7	11.3	3.2	2.4	2.8
14	0.0	6.8	3.1	0.0	1.4	0.7
15	3.3	26.4	14.7	2.9	4.6	3.8
16	20.8	17.6	19.9	0.0	0.0	0.0
17	6.4	12.1	8.6	7.4	11.9	9.2
18	10.3	21.7	16.2	13.0	0.0	6.3
19	10.3	0.0	5.2	0.0	0.0	0.0

Source: CWIQ 2006 Musoma DC

1. Base for table is the secondary school-age population (age 14-19)

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

	Male	Female	Total
Total	84.7	67.6	75.8
15-19 years	92.4	94.1	93.1
20-29 years	88.9	81.1	84.8
30-39 years	86.1	79.8	82.3
40-49 years	84.4	60.1	71.1
50-59 years	88.5	33.0	58.9
60+ years	60.1	9.8	36.5
Accessible	86.8	71.5	78.8
15-19 years	93.7	95.5	94.5
20-29 years	91.7	84.0	87.6
30-39 years	87.8	81.6	83.9
40-49 years	82.9	68.9	75.7
50-59 years	92.4	34.0	65.5
60+ years	64.0	14.0	38.1
Remote	82.2	62.8	72.2
15-19 years	90.7	92.6	91.5
20-29 years	85.6	77.4	81.4
30-39 years	84.1	77.1	80.1
40-49 years	86.9	49.5	64.8
50-59 years	84.7	32.5	54.0
60+ years	56.3	3.5	34.7

Source: CWIQ 2006 Musoma DC

1. Base is population age 15+

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

	Male	Female	Total
Total	90.7	86.4	88.7
15-17 years	94.2	96.8	95.2
18-20 years	90.9	82.4	86.9
21-22 years	73.0	76.3	74.8
23-24 years	94.2	85.0	89.5
Accessible	92.3	87.8	90.2
15-17 years	94.3	96.8	95.2
18-20 years	92.8	86.3	89.6
21-22 years	83.0	86.5	85.1
23-24 years	91.0	76.6	84.2
Remote	88.9	84.8	87.0
15-17 years	94.1	96.9	95.2
18-20 years	89.0	77.6	83.8
21-22 years	66.3	66.2	66.2
23-24 years	100.0	95.9	97.7

Source: CWIQ 2006 Musoma DC

1. Base is population aged 15-24

Secondary School

Table 3.5 shows secondary net enrolment patterns by age. Secondary school enrolment rates are much lower than those at primary level. 11 percent of secondary school-aged children was enrolled compared to 88 percent in primary school. For a person following a normal school curriculum, i.e. started standard one at age 7, he/she is expected to start form one at age 14. From this table we see that the biggest difference in enrolment rates is observed between age 14 and 15. Furthermore, 20 percent of 16 year olds reported to be enrolled at the time of the survey. It is also noticeable that the rate of boys enrolled in secondary school at the age of 14 was lower than that of girls enrolled in secondary school at the same age at 9 and 15 percent respectively.

Secondary school drop-out rates among secondary school-age individuals (14 to 19 years) are higher compared to those of primary school. 3 percent of children of secondary school-age had dropped out in the year prior to the survey. In general, the highest drop-out rate is observed among 17 year olds. The highest drop-out rate among males is at the age of 18, while female drop out rate is highest at age of 17.

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 data on literacy was solely 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. Furthermore, questions that helped determine adult literacy was only asked for individuals aged 15 or older.

Adult Literacy

Overall, 76 percent of the population aged 15 and above in the district are literate. The difference in literacy rates among men and women is about 17 percentage points at 85 and 68 percent respectively. Individuals aged between 15 and 19 have the highest literacy rate (93 percent) while only 37 percent of those who are above 60 years know how to read and write. There are significant gender differences in literacy, being larger for the older cohorts.

The literacy rate in accessible villages is 7 percentage points higher than in remote villages. The literacy rate for the 50-59 age-groups in remote villages is 54 percent, whereas for accessible villages the rate is 66 percent. Furthermore, in accessible villages the literacy rate of men is 15 percentage points higher than that of women. In remote villages, the difference increases to 19 percentage points. On the contrary, while the literacy rate of women in accessible villages is about 9 percentage points higher than that of women in remote villages, the difference in literacy rates between men in accessible and remote villages is 5 percentage points. Finally, there is a significant difference in literacy rates among men and women above 60 years in both cluster locations. In both cases, the literacy rates of men over 60 years are above 50 percentage points higher than that of women.

Youth Literacy

Table 3.7 shows literacy rates among the youth by age, gender and residential location. Youth literacy rate is calculated for all persons between 15 and 24 years old. The literacy rate for this group is 89

percent, but the gender difference is important. While the literacy rate for men is 91 percent, the rate for women is 5 percentage points lower, at 86 percent.

Analysis by age-groups shows that 15 to 17 year olds have the highest literacy rate at 95 percent. The same rate cuts across both accessible and remote villages. Youth literacy rate in accessible villages is slightly higher than that of youth in remote villages at 90 and 87 percent respectively.

4 HEALTH

This chapter examines health indicators for the population in Musoma 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 reported no problems with the service received.

Table 4.1 shows medical services indicators. Overall, 37 percent of the households have access to medical services. Conversely, 63 percent of the households in the district do not have access to medical services.

Household in accessible villages have higher access to medical services (54 percent) than households in remote villages (17 percent). Households in remote villages have slightly higher need and use rates at 36 percent

Table 4.1 - Health Indicators

	Medical Services			
	Access	Need	Use	Satisfaction
Total	36.8	32.4	33.0	72.4
Cluster Location				
Accessible	53.7	29.3	30.1	76.0
Remote	15.9	36.2	36.6	68.8
Poverty Status				
Poor	28.7	34.6	36.6	75.5
Non-poor	44.3	30.4	29.6	69.0
Socio-economic group				
Employed	63.3	28.4	30.0	89.9
Self-employed - agriculture	33.0	33.1	34.2	68.9
Self-employed - other	40.8	27.5	28.3	83.3
Other	47.7	42.3	34.7	75.4
Gender				
Male	35.6	29.9	30.9	73.6
Female	37.9	34.9	35.1	71.5
Age				
0-4	35.9	45.0	61.4	71.0
5-9	38.5	28.5	26.4	70.1
10-14	36.7	26.6	24.9	78.7
15-19	33.0	23.7	23.4	74.4
20-29	35.7	24.5	22.8	76.5
30-39	40.4	28.5	25.3	83.8
40-49	38.2	27.1	25.7	67.0
50-59	41.5	54.9	48.7	79.4
60+	35.2	48.8	38.2	63.2

Source: CWIQ 2006 Musoma DC

1. Access is defined for persons in households less than 30 minutes from a health facility.
2. Need is defined for persons sick or injured in the four week period preceding the survey.
3. Use is defined for persons who consulted a health practitioner in the four week period preceding the survey.
4. Satisfaction is defined for persons who consulted a health practitioner in the four week period preceding the survey and who cited no problems.
5. Base is total population. For satisfaction, base is population that used medical services.

compared to households in accessible villages at 30 percent. Households in accessible villages reported higher satisfaction rates at 76 percent compared to households in remote villages who reported a lower satisfaction rate at 69 percent.

Regarding poverty status non-poor households reported a higher access rate at 44 percent than poor households who reported access at 29 percent, however poor households reported higher rates of need (35 vs. 30 percent), use (37 vs. 30 percent) and satisfaction (76 vs. 69 percent) compared to non-poor households.

Regarding socio-economic status, households where the main income earner is an employee reported the highest access rate at 71 percent while the lowest rate was reported by households where the main income

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earner is self-employed in agriculture at 33 percent. The highest need and use rates were reported by households whose main income earner belongs to the 'other' category at 44 percent and 36 percent respectively. In turn, the employee group reported the highest satisfaction rate at 89 percent while the lowest satisfaction rate was reported by households belonging to the self-employed in agriculture at 69 percent.

There are slight differences in access, need and satisfaction rates reported by both genders. Females reported a higher access rate at 39 percent and need rate of 34 percent, 3 points lower than rates reported by male interviewees. However, males reported a higher satisfaction rate at 74 percent, 3 points higher than the rate reported by female interviewees. There were no differences in use rate.

Desegregation by age shows that the lowest access rate was reported by the 15 to 19 age-group at 32 percent. The 50 to 59 cohort reported the highest access rate at 44 percent as well as the highest need rate at 53 percent. The highest use rate was reported by the 0 to 5 age-group while the lowest use rate

was reported by the 20 to 29 age-group at 23 percent. The highest satisfaction was reported by the 30 to 39 age-group while the 60+ age-group reported the lowest satisfaction rate at 63 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 are dissatisfied, mostly because of long waits (42 percent) and cost (30 percent). Unsuccessful treatment was reported as the reason for dissatisfaction at 17 percent, drug unavailability at 13 percent and unavailability of trained professionals at 10 percent.

The analysis by cluster location shows that households from accessible and remote villages reported long wait as the first reason for dissatisfaction (49 percent and 36 percent respectively) and cost as the second reason (30 percent for both). Households from remote villages reported a higher overall dissatisfaction rate at 31 percent compared to their

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

	Percent dissatisfied	Reasons for dissatisfaction						
		Facilities not clean	Long wait	No trained professionals	Cost	No drugs available	Treatment unsuccessful	Other
Total	27.6	1.6	45.4	9.1	27.6	12.0	16.4	1.2
Cluster Location								
Accessible	24.0	2.4	51.4	5.6	27.8	12.9	13.1	0.0
Remote	31.2	1.1	40.7	11.9	27.5	11.2	19.0	2.1
Poverty Status								
Poor	24.5	2.8	43.4	2.5	32.7	10.7	11.4	2.4
Non-poor	31.0	0.6	47.2	15.1	23.0	13.1	21.0	0.0
Socio-economic group								
Employed	10.1	0.0	76.3	0.0	0.0	23.7	0.0	0.0
Self-employed - agriculture	31.1	2.0	43.8	10.5	29.6	13.0	15.3	1.4
Self-employed - other	16.7	0.0	53.8	3.9	22.5	3.9	19.8	0.0
Other	24.6	0.0	45.9	0.0	14.9	6.3	32.9	0.0
Gender								
Male	26.4	1.8	42.8	8.1	30.7	13.9	14.1	0.9
Female	28.5	1.5	47.4	9.9	25.2	10.4	18.2	1.4
Type of provider								
Public hospital	41.7	2.3	61.0	12.0	12.0	15.5	13.4	0.0
Private hospital	17.1	0.0	9.1	8.1	59.7	7.0	24.2	8.1
Religious hospital	33.4	0.0	28.7	0.0	71.3	0.0	25.4	0.0
Village health worker	5.2	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Private Doctor/Dentist	49.1	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Pharmacist	11.8	0.0	0.0	0.0	89.3	0.0	5.1	5.6
Trad. Healer	21.0	0.0	0.0	0.0	24.7	0.0	75.3	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Musoma DC

1. For column 1, the base is population that used medical services. For the rest, the base is the dissatisfied population.

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

	Percent not consulting	Reasons for not consulting				
		No need	Cost	Distance	No confidence	Other
Total	67.0	95.3	2.7	1.4	0.1	1.1
Cluster Location						
Accessible	69.9	96.6	2.2	0.6	0.0	1.1
Remote	63.4	93.4	3.5	2.4	0.1	1.2
Poverty Status						
Poor	63.4	95.5	2.3	1.5	0.1	1.5
Non-poor	70.4	95.1	3.1	1.3	0.0	0.8
Socio-economic group						
Employed	70.0	98.2	0.0	0.0	0.0	1.8
Self-employed - agriculture	65.8	95.4	2.5	1.5	0.0	1.0
Self-employed - other	71.7	95.1	2.5	1.3	0.0	1.4
Other	65.3	90.9	8.2	1.1	0.9	0.0
Gender						
Male	69.1	95.1	2.3	1.5	0.1	1.5
Female	64.9	95.5	3.1	1.3	0.0	0.7
Type of sickness/injury						
Fever/malaria	5.9	20.4	55.1	16.1	2.9	12.8
Diarrhea/abdominal pains	9.3	27.1	72.9	10.0	0.0	9.7
Pain in back, limbs or joints	15.2	12.9	82.7	15.4	0.0	0.0
Coughing/breathing difficulty	8.4	20.4	74.4	20.2	0.0	5.2
Skin problems	9.7	0.0	100.0	36.6	0.0	0.0
Ear, nose, throat	7.4	0.0	100.0	0.0	0.0	0.0
Eye	29.4	22.0	63.0	30.0	0.0	0.0
Dental	5.8	0.0	100.0	0.0	0.0	0.0
Accident	0.0	0.0	0.0	0.0	0.0	0.0
Other	23.3	11.8	76.1	0.0	0.0	27.5

Source: CWIQ 2006 Musoma DC

1. For column 1, the base is total population. For columns 2 to 6, population that not consulted medical services.

counterparts in accessible villages who reported an overall dissatisfaction rate of 24 percent.

Regarding poverty status, non-poor households reported higher dissatisfaction rates at 31 percent than non-poor households at 25 percent. The leading reason reported for dissatisfaction for both was long wait where poor households reported at a rate of 43 percent while poor non-households reported at a rate of 43 percent. Cost was reported as a reason for poor households at a rate of 33 percent compared to non-poor who only reported cost as a reason at 23 percent. Unsuccessful treatment was reported by non-poor households at a rate of 21 percent compared to poor households at 11 percent. Lack of trained professionals was reported by a higher share of non-poor households at 15 percent than poor households at 3 percent.

Households where the main income earner is self-employed in agriculture reported the highest dissatisfaction rate at 31 percent while employees reported the lowest dissatisfaction rate at 11 percent. Long wait was reported as the

lead reason for dissatisfaction by employees (76 percent), self-employed in agricultural activities (40 percent), self-employed in non-agricultural activities (52 percent) and 'other' (46 percent). The second most frequently reported reason was cost for households where the head is self-employed in agriculture (32 percent) and self-employed in non-agricultural (25 percent). Drug unavailability was the second reason for the employees (24 percent) and unsuccessful treatment for the households lead by those employed in 'other' sectors at 33 percent. Lack of trained professional was reported as a reason for dissatisfaction by the households belonging to the self-employed in agriculture socio-economic group at 11 percent and by the self-employed in 'other' at 4 percent.

Breakdown by gender shows both male and females reported long wait as the reason for dissatisfaction by similar proportions (an average of 42 percent). Cost was reported by females as a reason for dissatisfaction at 28 percent, lower than males, at 32 percent. Unsuccessful treatment is reported slightly higher by females at 19 percent

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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, gender and age

	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	32.4	60.7	14.1	15.0	23.1	2.8	1.9	2.3	1.7	0.7	3.6
Male Total	29.9	66.1	9.4	11.9	22.8	2.8	1.8	1.8	1.0	1.2	4.1
0-4	44.7	84.5	13.1	2.2	14.9	3.8	0.9	0.6	0.0	0.8	1.7
5-9	28.2	63.8	13.6	5.9	21.3	6.5	4.3	0.0	0.0	0.0	4.4
10-14	25.9	60.0	10.5	11.7	35.6	0.0	1.7	0.0	1.5	0.0	5.7
15-29	20.4	57.2	2.1	10.0	27.8	1.4	3.5	2.0	1.3	3.4	5.1
30-49	20.6	68.0	2.1	12.7	17.2	3.6	0.0	0.0	5.7	0.0	7.1
50-64	42.0	47.5	7.2	29.2	27.7	0.0	0.0	3.3	0.0	3.1	3.3
65+	51.7	51.1	12.9	40.2	22.1	2.4	1.7	12.1	0.0	2.4	4.5
Female Total	34.9	56.3	18.1	17.5	23.4	2.8	2.0	2.7	2.4	0.2	3.1
0-4	45.3	68.7	18.6	1.0	16.8	7.3	1.7	1.4	0.0	0.0	2.4
5-9	28.7	73.5	6.8	3.1	31.4	1.5	1.9	3.6	0.0	0.0	0.0
10-14	27.3	67.1	1.8	9.3	40.7	3.8	0.0	0.0	1.6	0.0	1.2
15-29	29.7	55.5	28.0	20.2	15.9	1.0	2.5	1.3	2.5	1.0	2.3
30-49	33.7	45.9	21.4	25.9	21.3	0.0	4.1	0.9	7.0	0.2	7.5
50-64	47.6	27.2	24.3	41.7	36.9	4.2	0.0	10.2	4.7	0.0	2.5
65+	54.9	29.3	22.3	53.7	13.3	0.0	1.8	9.6	0.0	0.0	4.7

Source: CWIQ 2006 Musoma DC

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

2. Base is population sick.

than males at 15 percent. Lack of trained professionals was reported as a reason for dissatisfaction at an average of 10 percent for both male and female.

Regarding health provider, the main cause of dissatisfaction in public hospitals is the long wait (58 percent), whereas in private hospitals the lead reason is cost (60 percent) similarly with religious hospitals (71 percent), private doctors (100 percent) pharmacists (89 percent). Drug availability was reported as the lead reason for dissatisfaction in village health workers. Unsuccessful treatment was the main reason for dissatisfaction in traditional health workers (100 percent).

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, 67 percent of the population did not consult a health provider, typically because there was no need (95 percent of the cases).

The analysis of cluster location shows that households from accessible and remote villages reported no need to consult a healthcare provider at rates of 97 and 94 percent respectively. Both

reported cost as the main reason at roughly 3 percent. Households from remote villages reported distance at a similar rate.

Poverty status shows that non-poor households reported higher rates of not consulting a health provider at 74 percent than poor households at 64 percent. However, there were no differences in rates reported in reasons.

The split-up 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 reported the highest share at 100 percent, self-employed in agriculture at 96 percent, self-employed in other at 94 percent, and 'other' at 90 percent. Cost was reported at 9 percent by 'other' and 3 percent by households headed by the self-employed in other and 2 percent for the 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' (95 percent average), cost (at an average of 3 percent) as reasons for not visiting a healthcare professional.

Type of illness shows that for most infirmities, skin problems (100 percent), ear, nose and throat and dental (100

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	47.7	8.0	2.5	2.3	0.2	31.8	7.1	0.5	100.0
Cluster Location									
Accessible	49.8	9.5	2.2	3.3	0.4	27.9	6.4	0.5	100.0
Remote	45.6	6.6	2.7	1.2	0.0	35.7	7.8	0.4	100.0
Poverty Status									
Poor	42.4	10.4	1.7	2.8	0.2	35.0	7.3	0.2	100.0
Non-poor	53.9	5.3	3.3	1.7	0.2	28.1	6.8	0.7	100.0
Socio-economic group									
Employed	61.4	7.7	8.0	0.0	0.0	14.9	8.1	0.0	100.0
Self-employed - agric	48.4	7.1	1.7	2.4	0.3	33.0	6.6	0.5	100.0
Self-employed - other	32.4	13.4	4.6	3.5	0.0	36.2	9.1	0.7	100.0
Other	66.7	6.4	1.9	0.0	0.0	17.9	7.1	0.0	100.0

Source: CWIQ 2006 Musoma DC

1. Base is population who consulted a health provider

percent), fever and malaria (52 percent) the main cause for not consulting a health practitioner is cost. Distance was reported at a rate of 37 percent for skin problems, 18 percent for fever and malaria, and 20 percent for coughing and breathing difficulties.

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 61 percent of the ill population. In turn, coughing and breathing difficulties come in at second place affecting 24 percent of the ill population, followed by pain in the back, joints or limbs and diarrhoea affected 15 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: 34 percent vs. 31 percent of males, but there are slight differences by type of illness where males' rates are higher in malaria and fever at 66 percent while female rate are reported at 10 points lower. The age breakdown shows that the share of sick/injured population starts at around 46 percent for children under 5 years old, decreases for the 5 to 9 age-group, stabilizes between 26 and 30 percent, and then starts increasing again for the 30 to 49 cohort, peaking for the population aged 65 and over for male (51 percent) and female (55 percent). The share of ill population is highest among the 65 + shares affected by malaria are highest among the under 5 male at 84 percent and highest among the 5 to 9 age-group at 67 percent but

this reduces as other problems emerge, mainly pain in back, limbs or joints as the population ages.

4.5 Health Provider

Table 4.5 shows the percent distribution of health consultations in the 4 weeks preceding the survey. Overall, 48 percent of the consultations were made in public hospitals, 33 percent to pharmacists or chemists, 3 percent in religious hospitals, 7 percent to traditional healers and 8 percent in private hospitals.

The breakdown by location shows that households in accessible villages reported going to public hospitals at 50 percent compared to households in remote villages 46 percent. In turn households in remote villages visit pharmacists and chemists at a higher rate (36 percent) versus households in accessible villages (29 percent).

Regarding poverty status poor households reported visiting public hospitals at a rate of 42 percent while non-poor households reported visits at a rate of 54 percent. However, poor households reported visiting private hospitals at a higher rate at 10 percent compared to non-poor households at 5 percent. Pharmacists and chemists were reported by poor households at a rate of 35 percent while non-poor households reported at a rate of 28 percent.

There are no clear trends when analysing the socio-economic group of the household. Households belonging to 'other' socio-economic group reported visiting public hospitals at a higher rate than the other groups at 70 percent,

4 Health

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	7.9	33.4	23.3	22.2	1.5	14.1	95.3
Cluster Location								
Accessible	0.0	8.6	28.7	17.5	21.4	0.0	12.4	98.2
Remote	0.0	7.2	38.8	31.6	23.5	3.4	16.3	92.5
Poverty Status								
Poor	0.0	7.1	36.8	29.4	29.7	1.5	16.8	94.6
Non-poor	0.0	8.5	30.8	19.4	15.3	1.6	12.0	96.2
Socio-economic group								
Employed	0.0	12.2	0.0	20.1	21.2	0.0	10.3	76.1
Self-employed - agric	0.0	4.4	45.6	29.6	23.8	1.4	15.5	96.5
Self-employed - other	0.0	23.8	9.9	11.1	19.9	4.5	12.4	100.0
Other	0.0	0.0	32.4	0.0	15.4	0.0	6.8	64.7

Source: CWIQ 2006 Musoma DC

1. Base is females aged 12 or older.

followed by the employees at 66 percent and then by the self-employed in agriculture at 48 percent. The self-employed in other reported the highest rate of visits made in pharmacists and chemists at 39 percent as well as the highest rate of visits made in private hospitals at 14 percent.

4.6 Child Delivery

Table 4.6 shows the percentage of women aged 12 to 49 who had a live birth in the year preceding the survey. Overall, 14 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 7 percent of the females between 15 and 19 gave birth. The rate peaks at 34 percent for the 20 to 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 some 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. Women in remote villages reported consistently higher shares of births in the age-groups between 15 and 29 compared to their counterparts from accessible villages. In addition women from accessible villages reported no births in the 40 and above age-group while women from remote villages reported a 4 percent birth rate. Note that women from remote villages reported attending pre natal care at 92 percent, 6 points lower than the rate reported by women from accessible villages.

Regarding poverty status, women from poor households reported more births between 20 and 24 years of age at 8 points higher than non-poor women and between the ages of 25 to 29 poor women reported 10 points higher than non-poor women. Between the ages of 35 to 39 women from poor households reported births at 30 percent while non-poor women reported births at 15 percent.

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 in agriculture, the highest birth rate being reported among the 20 to 29 at 45 percent. Women from households belonging to the 'self-employed other' socio-economic group showed the highest birth rate for the 15-19 age-group with a rate of 21 percent. Women from households where the main income earner is employed in other sectors showed the highest rate for the 20 to 24 age-group with rates of 32 percent. Note that only 65 percent of women from the 'other' group received pre-natal care.

Table 4.7 shows the percentage distribution of births in the five years preceding the survey. Roughly, 70 percent of births in the 5 years preceding the survey took place at home, 22 percent in a hospital, 7 percent in a dispensary and 1 percent in a health centre. The ordering remains across cluster location and socio-economic group of the household head.

Women from households in accessible villages had a higher share of births in hospitals (27 percent), than women from households in remote villages (16

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	22.7	0.5	7.1	0.0	68.9	0.8	100.0
Cluster Location							
Accessible	28.7	0.3	8.9	0.0	62.1	0.0	100.0
Remote	15.2	0.8	4.8	0.0	77.4	1.8	100.0
Poverty Status							
Poor	16.4	1.0	8.0	0.0	74.2	0.4	100.0
Non-poor	29.9	0.0	6.0	0.0	62.8	1.3	100.0
Socio-economic group							
Employed	0.0	0.0	19.9	0.0	80.1	0.0	100.0
Self-employed - agriculture	19.9	0.7	7.9	0.0	70.4	1.1	100.0
Self-employed - other	39.2	0.0	1.0	0.0	59.8	0.0	100.0
Other	19.7	0.0	7.9	0.0	72.4	0.0	100.0

Source: CWIQ 2006 Musoma DC

1. Base is children under 5 years old.

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

	Doctor	Midwife	Trained		Other	Don't	Total	Delivery by health prof.
	Nurse		T.B.A.	T.B.A.	Self	know		
Total	0.0	30.7	5.8	12.6	48.9	2.0	100.0	36.5
Cluster Location								
Accessible	0.0	39.1	4.2	13.1	42.1	1.5	100.0	43.3
Remote	0.0	20.4	7.8	12.0	57.2	2.6	100.0	28.1
Poverty Status								
Poor	0.0	24.7	4.5	13.4	54.4	3.0	100.0	29.2
Non-poor	0.0	37.7	7.4	11.7	42.4	0.8	100.0	45.0
Socio-economic group								
Employed	0.0	19.9	0.0	17.7	62.4	0.0	100.0	19.9
Self-employed - agriculture	0.0	29.4	6.6	12.1	50.2	1.8	100.0	36.0
Self-employed - other	0.0	39.1	5.2	14.9	38.0	2.8	100.0	44.3
Other	0.0	26.5	0.7	8.5	60.5	3.8	100.0	27.2

Source: CWIQ 2006 Musoma DC

1. Base is children under 5 years old.

percent). In turn, women from remote villages had more births at home (77 percent) compares to women in accessible villages (64 percent).

Regarding poverty status women from non-poor households reported higher rate of births that took place in hospitals at 30 percent than poor women who reported lower rates at 16 percent. Women from poor households had more births at home at 74 percent compared to women from non-poor households at 63 percent.

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 36 percent, compared to women from households where the main income earner is self-employed in agriculture (20 percent), employee (0 percent) and other (15 percent). Births that took place at home were reported by 76 percent of women from households belonging to the

'employee' group, 71 percent for self-employed agriculture and 73 percent for other. The highest share of births attended in dispensaries was reported by women from households belonging to the 'employee' category at 24 percent.

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, 36 percent of births were attended by a health professional. Traditional birth assistants (TBA) and trained TBA accounted for 6 and 12 percent, 30 percent by midwives and no doctors or nurses attended the deliveries reported from the district. The highest births took place without assistance at 50 percent.

The analysis by cluster location shows that midwives were the second most common in accessible villages and remote villages (38 and 20 percent), whereas for both remote and accessible villages deliveries without assistance

were more common at 57 and 45 percent respectively.

Regarding poverty status non-poor women reported higher rates of deliveries attended by midwives, with women from poor households reporting a rate of 25 percent while women from non-poor households reported a rate of 38 percent. Women from poor households reported a higher rate of deliveries without assistance at 54 percent than non-poor women at 42 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 (36 percent) against 20 percent, and 24 percent of self-employed in agriculture, and 'other'. Women from households where the main income earner is employed reported the highest rate of self-attended child deliveries at 76

percent.

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

Table 4.9: Nutritional status indicators and program participation rates

	Nutritional status indicators		Program participation		
	2SD)	2SD)	Nutrition	Weigh-in	Vaccinated
Total	25.1	0.5	60.8	93.2	87.1
Cluster Location					
Accessible	24.9	0.0	59.5	91.9	85.6
Remote	25.3	1.0	62.3	95.0	88.9
Poverty Status					
Poor	28.8	0.5	61.9	92.2	84.1
Non-poor	20.5	0.5	59.4	94.5	90.7
Socio-economic Group					
Employee	35.2	0.0	42.1	100.0	94.7
Self-employed - agriculture	26.7	0.1	59.1	91.5	83.9
Self-employed - other	18.8	2.5	69.5	98.3	97.1
Other	14.9	0.0	65.6	95.8	92.6
Gender and age in completed years					
Male	26.0	0.8	63.5	94.7	89.9
0	33.6	0.0	47.4	94.5	94.5
1	34.1	0.0	76.3	98.0	95.4
2	15.2	1.7	67.0	89.6	86.0
3	26.8	1.6	62.0	94.2	85.1
4	17.0	0.0	62.1	100.0	83.7
Female	24.0	0.1	57.9	91.7	84.2
0	4.9	0.0	48.2	90.4	90.4
1	38.0	0.0	59.5	94.3	86.5
2	22.8	0.0	46.8	95.2	84.5
3	23.8	0.4	72.0	84.5	78.7
4	13.2	0.0	61.5	94.5	79.1
Orphan status					
Orphaned	23.1	3.5	41.8	91.2	71.5
Not-orphaned	24.9	0.3	61.8	93.9	88.5
Foster status					
Fostered	15.9	0.0	71.2	91.9	75.2
Not-fostered	26.2	0.5	61.0	94.1	89.0

Source: CWIQ 2006 Musoma DC

1. Base of Table is total number of children under 5.

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 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, 1 percent of all the children is wasted, and 25 percent is stunted. 60 percent of the children was reported to participate in nutrition programs. 85 percent was reported to have been vaccinated.

Cluster location shows no differences in rates of wasted and stunted children. However, remote villages reported higher rates of vaccinated children at 91 percent than accessible villages where only 84 percent of children were reported to have been vaccinated.

Regarding socio-economic status, households in the self-employed in non-agricultural activities category show the highest rates for stunted children at 38

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	71.5	92.7	91.6	88.6	85.2	68.7	90.3	88.4	86.5	70.1
Cluster Location										
Accessible	71.6	91.6	91.3	88.4	84.6	74.8	90.1	88.0	86.7	72.3
Remote	71.3	93.9	91.9	88.8	86.0	61.2	90.5	88.8	86.1	67.2
Poverty Status										
Poor	68.7	90.0	87.9	85.5	82.6	65.6	86.9	86.1	84.0	66.7
Non-poor	74.8	95.8	95.9	92.1	88.4	72.5	94.3	91.1	89.4	74.0
Socio-economic group										
Employed	73.6	100.0	100.0	100.0	100.0	90.8	100.0	100.0	100.0	69.3
Self-employed - agriculture	69.4	92.1	90.6	87.7	84.7	67.6	89.1	87.3	85.4	70.7
Self-employed - other	75.0	93.9	93.9	90.2	83.7	65.3	92.9	90.4	87.9	67.5
Other	88.1	92.0	92.0	88.1	88.1	83.4	92.0	88.1	88.1	70.1
Gender and age in completed years										
Male	70.6	94.0	93.2	91.1	87.5	70.0	92.1	89.8	88.1	68.5
0	12.2	89.5	85.7	76.1	62.1	64.1	82.7	72.6	68.5	19.3
1	88.5	98.0	98.0	98.0	98.0	77.1	96.1	95.8	95.8	86.4
2	84.8	93.4	93.7	93.7	91.6	70.2	93.7	93.7	90.2	75.4
3	87.5	93.9	93.9	93.9	93.9	70.4	93.9	93.9	93.9	82.1
4	89.1	95.8	95.8	95.8	95.8	62.2	95.8	95.8	95.8	91.5
Female	72.5	91.2	89.9	85.9	82.8	67.4	88.4	86.9	84.7	71.7
0	14.6	91.0	85.0	65.0	51.3	60.3	78.2	70.6	59.6	15.6
1	79.3	86.4	87.4	87.4	86.3	71.1	87.0	87.0	87.0	79.2
2	95.6	95.6	95.6	95.6	95.2	67.0	95.6	95.6	95.6	92.4
3	85.9	94.2	92.0	92.0	92.0	73.3	92.0	92.0	92.0	87.0
4	91.4	91.4	91.4	91.4	91.4	62.7	91.4	91.4	91.4	87.2

Source: CWIQ 2006 Musoma DC

1. Base of table is total number of children under 5.

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

	Health Card	Other	Total
Total	97.1	2.9	100.0
Cluster Location			
Accessible	96.9	3.1	100.0
Remote	97.3	2.7	100.0
Poverty Status			
Poor	96.9	3.1	100.0
Non-poor	97.3	2.7	100.0
Socio-economic group			
Employed	100.0	0.0	100.0
Self-employed - agriculture	96.6	3.4	100.0
Self-employed - other	97.9	2.1	100.0
Other	100.0	0.0	100.0
Gender and age in completed years			
Male	97.7	2.3	100.0
0.0	89.5	10.5	100.0
1.0	100.0	0.0	100.0
2.0	100.0	0.0	100.0
3.0	100.0	0.0	100.0
4.0	100.0	0.0	100.0
Female	96.4	3.6	100.0
0.0	84.5	15.5	100.0
1.0	100.0	0.0	100.0
2.0	100.0	0.0	100.0
3.0	97.7	2.3	100.0
4.0	100.0	0.0	100.0

Source: CWIQ 2006 Musoma DC

1. Base of table is total number of children under 5 vaccinated.

percent, followed by the self-employed in agriculture 27 percent and the self-employed in other at 18 percent, and the lowest rate reported among the 'other' at 16 percent. Households where the main income earner is self-employed in non-agricultural activities show a rate of 3 percent of stunted children the lowest reported rate of vaccinated rates are among the self-employed in agriculture at 84 percent who also show the lowest attendance of children in nutritional programs at 35 percent.

Regarding poverty status, poor households were reported to have higher rates of stunted children at 29 percent, 9 points higher than children from non-poor households. Children from poor households reported lower rate of vaccination at 84 percent compared to children from non-poor households at 91 percent.

The gender breakdown shows no difference in rates of wasted or stunted children

Breakdown by orphan status shows that non-orphaned children have a higher rate of attending nutritional program at 62 percent compared to orphaned children at 33 percent. Orphaned children reported a rate of wasted at 4 percent. Orphaned children reported a

vaccination rate of 75 percent than non-orphaned children who reported a higher rate by 13 points.

Fostered children reported a lower rate of stunted children at 16 percent than non-fostered children at 26 percent. Non-fostered children reported lower rates of enrolment in nutritional programs at 61 percent compared to fostered children at 71 percent, while fostered children reported lower rates of vaccination at 75 percent compared to non-fostered children at 89 percent.

Table 4.10 shows the percent distribution of children vaccinated by type of vaccination received. Overall, 70 percent of children under 5 years old have vaccination against measles, 92 against BCG, and roughly between 88 percent received vaccinations against DPT and OPV. In addition, 69 percent of the children in the district receive vitamin A supplements.

There are no differences by cluster location except for Vitamin A where children from households in accessible villages reported a rate 6 percentage points higher than children from households in remote villages.

Regarding poverty status, children from non-poor households reported higher rates of vaccinations against measles at 75 percent vs. 69 percent for children from poor households. Similarly vaccination rates reported for children from poor households were lower in almost all types of vaccination: BCG at 90 percent vs. 96 percent for children from non-poor households, DPT on average 85 percent vs. 92 percent for children from non-poor households, for OPV on average 81 percent vs. 87 percent for children from non-poor households and finally vitamin A 67 percent vs. 74 percent respectively.

The breakdown by socio-economic group shows that vaccination rates in most cases are highest for children from the employee category, except for measles where the highest reported rates are among the 'other' category at 86 percent.

The gender breakdown shows similar vaccination rates for females and males. 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 97 percent of the vaccinated children was supported by a vaccination card.

There is no difference reported by poverty status, cluster location or socio-economic group. Furthermore, all children aged 1 and above had vaccination cards. Children between 0 and 11 months had vaccination cards in 90 and 85 percent of the cases, for males and females, respectively.

5 EMPLOYMENT

This chapter examines employment indicators for the population of Musoma 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.

5.1.1 Work Status

Table 5.1 shows that 67 percent of the adult population is employed and 23 percent underemployed. Unemployment is lower than 1 percent and the inactivity rate is 10 percent. This shows that underemployment is a bigger problem in

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	66.8	22.9	89.7	0.1	10.3	10.3	100.0
Cluster Location							
Accessible	65.7	24.3	90.0	0.0	10.0	10.0	100.0
Remote	68.1	21.2	89.3	0.1	10.6	10.7	100.0
Poverty Status							
Poor	67.4	23.4	90.8	0.2	9.0	9.2	100.0
Non-poor	66.3	22.5	88.8	0.0	11.2	11.2	100.0
Gender and age							
Male	60.8	28.1	88.9	0.0	11.1	11.1	100.0
15-29	68.7	17.9	86.7	0.0	13.3	13.3	100.0
30-49	51.1	44.5	95.5	0.0	4.5	4.5	100.0
50-64	61.3	34.5	95.8	0.0	4.2	4.2	100.0
65+	50.6	19.2	69.8	0.0	30.2	30.2	100.0
Female	72.4	18.0	90.4	0.1	9.5	9.6	100.0
15-29	76.2	15.2	91.4	0.0	8.6	8.6	100.0
30-49	70.6	25.7	96.3	0.3	3.3	3.7	100.0
50-64	76.9	10.1	87.0	0.0	13.0	13.0	100.0
65+	53.9	7.1	61.0	0.0	39.0	39.0	100.0

Source :CWIQ 2006 Musoma 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.

the area than unemployment. There are no remarkable differences by cluster location of poverty status. For both genders, underemployment peaks for the cohort aged between 30 and 49. Around 45 percent of the males in this group are underemployed, whereas the share for females is 26 percent.

The adult population that was not 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. The inactivity rate peaks for the population over 65, as would be expected, reaching 30 percent of males and 39 percent of females in that cohort.

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 and underemployment are higher for household heads than for the overall population. The breakdown by cluster location shows that household heads in

accessible villages have a higher activity rate than household heads from remote villages. There is no strong difference in underemployment rates. Heads of poor households have higher activity and underemployment rates.

The gender breakdown shows that in the general population and males are more likely to be underemployed than females. For heads of household the pattern is similar, but the rates are higher, at 44 and 29 percent for males and females respectively. The breakdown by age-groups shows that underemployment decreases with age of the household head. For the general population, it peaks for the 30-49 cohorts.

5.1.3 Youth Employment

Table 5.3 shows the distribution of the youth (ages 15 to 24) by work status. The activity rate of this group is similar to the overall population, at 88 percent. However, underemployment is lower: 11 percent of this cohort is underemployed, as opposed to 1 of every 23 percent of the population aged 15 and over. The breakdowns by poverty status and cluster location show that the youth from non-

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

	Total population			Heads of household		
	Active population	Unemployment rate	Underemployment rate	Active population	Unemployment rate	Underemployment rate
Total	89.7	0.1	25.5	91.8	0.0	40.7
Cluster Location						
Accessible	90.0	0.0	27.0	93.7	0.0	39.6
Remote	89.4	0.2	23.7	89.4	0.0	42.3
Poverty Status						
Poor	91.0	0.2	25.8	93.7	0.0	42.8
Non-poor	88.8	0.0	25.3	90.8	0.0	39.6
Gender and age						
Male	88.9	0.0	31.6	92.6	0.0	43.9
15-29	86.7	0.0	20.7	97.4	0.0	55.1
30-49	95.5	0.0	46.6	96.3	0.0	47.5
50-64	95.8	0.0	36.0	95.6	0.0	37.0
65+	69.8	0.0	27.5	72.8	0.0	27.5
Female	90.5	0.1	19.9	89.2	0.0	29.2
15-29	91.4	0.0	16.7	100.0	0.0	33.3
30-49	96.7	0.3	26.6	96.7	0.0	37.6
50-64	87.0	0.0	11.6	85.8	0.0	18.9
65+	61.0	0.0	11.7	66.3	0.0	9.6

Source :CWIQ 2006 Musoma 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		Total
	Employed	Under emp.	Working	Unemployed	Total	Inactive	
Total	77.3	10.5	87.8	0.0	87.8	12.2	100.0
Cluster Location							
Accessible	74.0	12.3	86.4	0.0	86.4	13.6	100.0
Remote	81.1	8.4	89.5	0.0	89.5	10.5	100.0
Poverty Status							
Poor	82.4	8.6	91.0	0.0	91.0	9.0	100.0
Non-poor	72.8	12.2	85.0	0.0	85.0	15.0	100.0
Gender and age							
Male	77.1	9.6	86.7	0.0	86.7	13.3	100.0
15-16	86.9	2.1	89.0	0.0	89.0	11.0	100.0
17-19	80.1	4.4	84.4	0.0	84.4	15.6	100.0
20-21	66.2	12.0	78.2	0.0	78.2	21.8	100.0
22-23	67.8	25.6	93.4	0.0	93.4	6.6	100.0
Female	77.6	11.6	89.2	0.0	89.2	10.8	100.0
15-16	79.7	2.1	81.8	0.0	81.8	18.2	100.0
17-19	73.8	11.5	85.3	0.0	85.3	14.7	100.0
20-21	74.0	19.4	93.3	0.0	93.3	6.7	100.0
22-23	82.1	14.9	97.0	0.0	97.0	3.0	100.0

Source :CWIQ 2006 Musoma 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 5.4 - Percentage distribution of the working population by type of payment in main job

	Employee	Self-employed		Other	Total
		Agriculture	Other		
Total	2.8	38.0	10.6	48.7	100.0
Cluster Location					
Accessible	4.0	33.4	14.4	48.1	100.0
Remote	1.2	43.5	5.9	49.3	100.0
Poverty Status					
Poor	1.8	34.7	10.6	52.9	100.0
Non-poor	3.5	40.5	10.6	45.4	100.0
Gender and age					
Male	4.5	47.0	17.7	30.7	100.0
15-29	3.2	21.9	14.8	60.1	100.0
30-49	6.3	64.1	26.7	2.9	100.0
50-64	3.9	78.2	11.7	6.2	100.0
65+	6.6	77.4	7.6	8.4	100.0
Female	1.1	29.8	4.1	65.0	100.0
15-29	1.0	12.7	4.5	81.8	100.0
30-49	1.3	41.4	5.4	51.9	100.0
50-64	1.6	51.5	0.0	46.9	100.0
65+	0.0	30.5	0.0	69.5	100.0

Source :CWIQ 2006 Musoma DC

1. Base is working population aged 15+

poor households and the youth from households in accessible villages have higher underemployment than their counterparts.

A breakdown by gender shows that underemployment rates among the male and female youth are similar at around 10 percent. It can be seen that underemployment is higher for the 20-21

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Table 5.5 - Percentage distribution of the working population by employer

	State/NGO/ Other	Private	Household	Total
Total	1.5	49.6	49.0	100.0
Cluster Location				
Accessible	2.4	49.6	48.0	100.0
Remote	0.3	49.5	50.2	100.0
Poverty Status				
Poor	0.2	46.6	53.2	100.0
Non-poor	2.4	51.8	45.8	100.0
Gender and age				
Male	1.8	67.2	31.0	100.0
15-29	0.9	38.2	60.8	100.0
30-49	1.7	95.4	2.9	100.0
50-64	2.4	91.3	6.2	100.0
65+	6.6	84.9	8.4	100.0
Female	1.2	33.6	65.2	100.0
15-29	0.0	18.5	81.5	100.0
30-49	1.9	44.7	53.3	100.0
50-64	3.4	51.5	45.1	100.0
65+	0.0	30.5	69.5	100.0

Source :CWIQ 2006 Musoma DC

1. Base is working population aged 15+

and 22-24 cohorts than for the younger ones.

5.2 Working population

Table 5.4 shows that almost half the working population is formed in the 'other' group (inactive, unemployed, unpaid workers, domestic workers). Self-employed in agriculture account for 38 percent of the working population, self-employed in non-agricultural activities account for 11 percent, and employees for the remaining 3 percent. The population self-employed in agriculture is higher in remote villages and non-poor households, whereas the employees and the self-employed in non-agricultural activities have higher shares in accessible villages.

The gender breakdown shows that a higher share of females in the 'other' group is higher than the share of males, whereas the latter have higher shares in the rest of activities. The cut down by age-groups shows that the share of employees peaks for males in the 65+ cohort (7 percent), the self-employed in agriculture for 50-64 males (78 percent), the 'self-employed other' for 30-49 males (27 percent) and 'other' for 65+ females (70 percent).

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) and the households each employ almost half the working population, with the share working for the State, an NGO or other employer is just 2 percent.

There are no strong differences by cluster location. However the breakdown by poverty status shows that households employ a higher share of workers in poor households while the private sector employs a higher share of workers in non-poor households.

The gender breakdown shows that males are more likely to work for a private employer whereas females are more likely to work for the household. The share of males working in the household is remarkably higher for the 15-29 cohort at 61 percent, compared to a range from 3 to 8 percent for the rest. In contrast, the share of males working for the private sector is higher for the cohorts over 30, between 85 and 95 percent, compared to 38 percent for the 15-29 cohorts. The share of females working in the private sector increases gradually with age, but is always lower than the respective shares of males. Furthermore, it decreases for the 65+ cohort, as the share working for the household increases.

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. Overall, agriculture and domestic duties together account for 91 percent of the working population. 73 percent of the population is engaged in agriculture, and 14 percent in domestic duties.

The split-up by accessibility of the village shows that 'agriculture' has higher shares in remote villages, whereas 'services' has a higher share in accessible villages. In turn, 'domestic duties' has a higher share in poor households than in non-poor households (16 and 12 percent, respectively).

The gender breakdown shows that the most common activities for females are agriculture and household duties, accounting for 94 percent of the working population. These are the main activities for men as well, but they are less concentrated, with 22 percent in other activities.

Table 5.6 - Percentage distribution of the working population by activity

	Agriculture	Mining/manuf/ energy/constr	Pub & priv services	Domestic duties	Other	Total
Total	72.6	0.9	6.5	13.9	6.2	100.0
Cluster Location						
Accessible	67.9	1.4	10.0	13.3	7.4	100.0
Remote	78.3	0.3	2.1	14.6	4.7	100.0
Poverty Status						
Poor	71.0	0.8	5.5	16.2	6.4	100.0
Non-poor	73.8	0.9	7.2	12.1	6.0	100.0
Gender and age						
Male	64.1	1.9	8.2	13.6	12.3	100.0
15-29	53.9	1.0	4.3	28.0	12.8	100.0
30-49	67.0	3.2	13.6	0.0	16.3	100.0
50-64	84.4	1.2	6.9	0.0	7.5	100.0
65+	79.8	3.0	11.2	6.0	0.0	100.0
Female	80.3	0.0	4.9	14.1	0.6	100.0
15-29	70.7	0.0	5.4	23.2	0.7	100.0
30-49	89.9	0.0	6.0	3.4	0.7	100.0
50-64	87.8	0.0	1.6	10.6	0.0	100.0
65+	67.0	0.0	0.0	33.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

1. Base is working population aged 15+

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
Agriculture	4.9	0.0	100.0	100.0	0.0	0.0	56.9	77.6	63.7	80.1
MMEC	3.5	0.0	0.0	0.0	9.0	0.0	0.0	0.0	1.8	0.0
Services	59.4	100.0	0.0	0.0	32.2	82.7	0.4	0.6	8.5	4.8
Domestic duties	0.0	0.0	0.0	0.0	0.8	3.4	41.9	21.8	14.0	14.5
Other	32.2	0.0	0.0	0.0	58.0	13.9	0.8	0.0	12.0	0.6

Source :CWIQ 2006 Musoma DC

1. Base is working population aged 15+

The breakdown by age-groups shows that younger cohorts have higher shares dedicated to household duties. The share of males in agriculture increases steadily with age. In turn, the share of women in agriculture is lower for the youngest and the oldest cohorts, where the shares dedicated to domestic duties increase.

Table 5.7 shows the percentage distribution of the working population by employment status, gender and activity. Overall, around 64 percent of the male labour force is in agriculture, whereas the share for females is 80 percent. Domestic duties have the second highest shares for both genders: 14 percent for males and 15 percent for females.

Female employees are overwhelmingly concentrated in services. More than half the male employees (59 percent) work in

services, and 32 percent in 'other activities'. The self-employed in non-agricultural activities work mostly in domestic duties and 'other activities'.

The population in the 'other' group is split between agriculture (57 percent of males, 78 percent of females) and domestic duties (42 percent of males, 22 percent of females).

The percentage distribution of the working population by employer, gender, and activity is shown in Table 5.8. Virtually all the females and three quarters of the males employed by the government are dedicated to services. The labour force working for private employers (whether formal or informal) is mostly dedicated to agriculture (70 percent of males, 86 percent of females). Individuals whose main activity is household duties either

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

	Government		Private		Household		Private Person/HH		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	12.2	0.0	69.7	86.4	53.6	77.7	56.9	77.6	63.7	80.1
MMEC	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Services	77.2	100.0	9.9	11.9	0.5	0.0	0.4	0.6	8.5	4.8
Domestic duties	0.0	0.0	0.0	0.0	45.0	22.3	41.9	21.8	14.0	14.5
Other	10.6	0.0	18.0	1.8	0.9	0.0	0.8	0.0	12.0	0.6

Source :CWIQ 2006 Musoma DC

1. Base is working population aged 15+

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

	Employee	Self-employed		Other	Total
		Agriculture	Other		
Total	1.5	59.3	16.2	23.1	100.0
Cluster Location					
Accessible	2.5	50.8	23.1	23.6	100.0
Remote	0.0	71.0	6.7	22.3	100.0
Poverty Status					
Poor	0.6	53.5	16.5	29.4	100.0
Non-poor	2.1	63.8	16.0	18.1	100.0
Gender and age					
Male	1.7	74.9	18.9	4.5	100.0
15-29	1.5	63.8	21.4	13.3	100.0
30-49	2.6	76.9	19.6	0.8	100.0
50-64	0.0	85.2	14.8	0.0	100.0
65+	0.0	89.2	10.8	0.0	100.0
Female	1.1	36.8	12.3	49.8	100.0
15-29	3.0	12.1	14.3	70.6	100.0
30-49	0.0	47.4	13.2	39.4	100.0
50-64	0.0	77.2	0.0	22.8	100.0
65+	0.0	47.6	0.0	52.4	100.0

Source :CWIQ 2006 Musoma DC

1. Base is underemployed population aged 15+

work in agriculture or undertake domestic tasks.

5.3 Underemployed Population

The percentage distribution of the underemployed population by employment status is shown in Table 5.9. Overall, 59 percent of the underemployed population is self-employed in agriculture, 16 percent self-employed in other activities, 23 percent is in 'other' and the remaining 2 percent has a position as an employee. Even though self-employed in agriculture are 38 percent of the population, they represent almost 60 percent of the underemployed.

The shares of employees and self-employed in non-agricultural activities are higher in accessible villages, while the share of self-employed in agriculture is higher in remote villages. The breakdown by poverty status shows that poor households have a higher share of 'other' (29 percent) than non-poor households (18 percent) while the latter have a higher share of self-employed in agriculture at 64 percent, against 54 percent of the former.

The gender breakdown shows that in the underemployed population, females are more likely than males to be in the 'other' category (with rates of 50 and 5 percent, respectively). In turn, males are more likely than females to be self-employed in agriculture (with rates of 75 and 37 percent, respectively).

For the underemployed females, the share of self-employment in agriculture increases with age until the 50-64 cohorts. Self-employed other is highest for the 15-29 age-group. For males, the share for self-employed in agriculture increases with age, whereas the share self-employed in non-agricultural activities decreases with age.

Table 5.10 shows the percentage distribution of the underemployed population by employer. Around three quarters (77 percent) of the underemployed population works for a private employer, whereas 23 percent works for the household.

For the underemployed population, cluster location does not show an evident correlation with type of employer. However, the breakdown by poverty status shows that the share working for private employers is higher in non-poor households whereas the share of underemployed workers working for the household is higher for poor households.

The gender breakdown reveals that the underemployed male population is vastly concentrated in private employers at 95 percent. The share for females is lower, at 52 percent. The age-group analysis shows that for males only the young cohort has a positive share of underemployed workers working for the household. In the case of females, the share of underemployed working for a private employer increases with age, as the share working for the household decreases.

The percentage distribution of the underemployed population by main economic activity is presented in Table 5.11. Overall, 81 percent of the underemployed workers are dedicated to agriculture.

The breakdown by poverty status does not show important differences. Accessible villages have a higher share of the underemployed labour force in services than remote villages, which in turn have a higher share in agriculture than the former.

The gender breakdown shows that underemployed women have a higher share dedicated to agriculture and services than underemployed males, who have slightly higher shares in 'other' activities. For both genders, the shares of underemployed workers in agriculture are higher for the older cohorts (50-64 and 65+).

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 0.1 percent of the adult population is unemployed, resulting in a sample size too small to draw solid statistical conclusions. However, they are all from poor households, remote villages 15 and 29 years old. The only cause cited is 'infirmity'.

Table 5.10 - Percentage distribution of the underemployed population by employer

	State/NGO/Other	Private	Household	Total
Total	0.3	77.2	22.5	100.0
Cluster Location				
Accessible	0.6	77.3	22.1	100.0
Remote	0.0	77.0	23.0	100.0
Poverty Status				
Poor	0.0	71.8	28.2	100.0
Non-poor	0.6	81.3	18.1	100.0
Gender and age				
Male	0.6	94.9	4.5	100.0
15-29	0.0	86.7	13.3	100.0
30-49	1.2	98.0	0.8	100.0
50-64	0.0	100.0	0.0	100.0
65+	0.0	100.0	0.0	100.0
Female	0.0	51.5	48.5	100.0
15-29	0.0	35.4	64.6	100.0
30-49	0.0	59.2	40.8	100.0
50-64	0.0	77.2	22.8	100.0
65+	0.0	47.6	52.4	100.0

Source :CWIQ 2006 Musoma DC

1. Base is underemployed population aged 15+

Table 5.11- Percentage distribution of the underemployed population by activity

	Agriculture	energy/constr	private services	Domestic duties	Other	Total
Total	81.2	1.8	10.4	0.3	6.4	100.0
Cluster Location						
Accessible	72.9	3.1	16.6	0.0	7.5	100.0
Remote	92.5	0.0	1.9	0.7	4.8	100.0
Poverty Status						
Poor	80.2	0.0	12.3	0.7	6.8	100.0
Non-poor	81.9	3.2	8.9	0.0	6.0	100.0
Gender and age						
Male	79.4	3.0	8.5	0.0	9.1	100.0
15-29	77.1	2.9	7.0	0.0	13.0	100.0
30-49	77.8	3.0	11.6	0.0	7.6	100.0
50-64	85.2	0.0	5.0	0.0	9.8	100.0
65+	89.2	10.8	0.0	0.0	0.0	100.0
Female	83.7	0.0	13.1	0.8	2.4	100.0
15-29	76.7	0.0	20.9	0.0	2.5	100.0
30-49	85.4	0.0	10.4	1.4	2.8	100.0
50-64	100.0	0.0	0.0	0.0	0.0	100.0
65+	100.0	0.0	0.0	0.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

1. Base is underemployed population aged 15+

Table 5.13 shows the main causes of economic inactivity. Overall, infirmity and being a student are the main reason for inactivity, each of them affecting around one third of the inactive population (36 percent each). The remaining share of the inactive population mostly reported being too old (13 percent) and other causes (14 percent).

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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	100.0	0.0	0.0	100.0
Cluster Location										
Accessible	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	100.0	0.0	0.0	100.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gender and age										
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0
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
Female	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	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	100.0	0.0	0.0	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 Musoma DC

1. Base is unemployed population aged 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	0.6	36.3	0.0	12.8	0.0	35.9	0.6	13.6	100.0
Cluster Location										
Accessible	0.0	0.0	41.6	0.0	13.3	0.0	30.4	0.0	14.8	100.0
Remote	0.0	1.4	30.4	0.0	12.4	0.0	42.3	1.4	12.3	100.0
Poverty Status										
Poor	0.0	0.0	30.2	0.0	7.4	0.0	46.7	1.7	14.0	100.0
Non-poor	0.0	1.0	40.0	0.0	16.1	0.0	29.5	0.0	13.4	100.0
Gender and age										
Male	0.0	1.2	45.9	0.0	7.4	0.0	29.8	1.2	14.5	100.0
15-29	0.0	0.0	79.5	0.0	0.0	0.0	9.0	0.0	11.4	100.0
30-49	0.0	10.0	0.0	0.0	0.0	0.0	47.4	0.0	42.6	100.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	34.8	26.7	38.5	100.0
65+	0.0	0.0	0.0	0.0	28.7	0.0	67.3	0.0	3.9	100.0
Female	0.0	0.0	26.0	0.0	18.8	0.0	42.6	0.0	12.6	100.0
15-29	0.0	0.0	68.3	0.0	0.0	0.0	15.6	0.0	16.1	100.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0	14.0	100.0
50-64	0.0	0.0	0.0	0.0	0.0	0.0	76.8	0.0	23.2	100.0
65+	0.0	0.0	0.0	0.0	57.6	0.0	39.5	0.0	2.9	100.0

Source :CWIQ 2006 Musoma DC

1. Base is inactive population aged 15+

'Student' has a higher in accessible clusters, whereas 'infirmity' is higher in remote villages. The breakdown by poverty status shows a similar pattern, with infirmity being higher for poor households and student being higher for non-poor households.

The breakdown by age-groups shows that infirmity is the only cause for inactivity that cuts across the whole inactive population. The share of females reporting infirmity is higher than that for males (43 vs. 30 percent, respectively). In turn, the share of males reporting being a student is higher than that of females, at 46 and 26 percent respectively.

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	61.6	57.6	48.6	57.0	78.0	93.2
Cluster Location						
Accessible	62.3	57.3	53.6	58.2	76.3	93.2
Remote	60.7	57.9	42.6	55.6	79.9	93.3
Poverty Status						
Poor	61.5	57.9	47.7	56.3	86.5	94.3
Non-poor	61.6	57.3	49.4	57.5	71.6	92.5
Gender and age						
Male	37.2	31.4	28.6	20.3	70.0	91.5
15-29	57.5	47.4	42.2	32.5	64.8	91.8
30-49	25.6	22.5	19.8	10.6	78.8	96.6
50-64	11.0	11.3	14.3	10.1	77.4	95.8
65+	4.0	4.1	5.9	2.7	58.7	68.3
Female	84.2	81.8	67.2	90.9	85.3	94.8
15-29	96.4	92.2	75.6	97.1	88.8	97.5
30-49	90.8	87.9	73.8	95.6	87.8	98.0
50-64	59.8	61.6	50.2	85.7	88.4	93.3
65+	22.4	26.5	15.3	42.9	50.5	66.6

Source :CWIQ 2006 Musoma DC

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 at least by 50 percent of the population.

The main difference by cluster location is that the share of people that helps cleaning toilets is higher in accessible villages than in remote villages. The remaining activities are undertaken by similar proportions of the population in each type of cluster. Similarly, the main difference by poverty status is the share of population taking care of children, which is higher in poor households.

The most important differences are shown in the gender and age-breakdown. Females report remarkably higher shares in all the activities, with most rates fluctuating between 67 and 95 percent. The shares for males fluctuate between 20 and 45 percent, except for taking care of children (70 percent) and of the sick and elderly (92 percent).

The analysis of age-groups shows that for males the shares decrease with age in all

activities except taking care of children. Similarly, in the case of females the shares decrease with age, showing sharp decreases in the oldest cohort.

5.6 Child Labour

Table 5.15 shows that the most common activity for children between 5 and 14 years old is fetching water. It is interesting to notice that the shares of children fetching water and firewood are higher than those for the rest of the population. Children from accessible villages report higher shares than children from remote villages. Children from poor households, in turn, report lower rates in fetching water, firewood or cleaning the toilet than children from non-poor households. In turn, taking care of children is undertaken by a higher share of children in poor households.

The gender breakdown shows that girls report higher rates than boys for all the household activities. 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 that orphaned children are more likely to perform all the tasks except taking care of the children, for which non-orphans report a higher share. The breakdown by foster

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status shows that fostered children report higher shares fetching water, firewood and cooking than non-fostered children; whereas both have similar shares cooking and the latter have higher shares taking care of children and the elderly or sick.

The main descriptive statistics for child labour are presented in Table 5.16. The most important result of the table is that 54 percent of the children are economically active. Their main economic activity is mostly household duties at 80 percent. There are no strong differences in

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	88.3	69.5	42.4	43.7	68.1	74.4
Cluster Location						
Accessible	89.7	70.1	50.8	44.8	69.2	77.3
Remote	86.5	68.8	31.2	42.3	66.7	70.5
Poverty Status						
Poor	85.5	66.2	39.0	44.1	76.7	74.6
Non-poor	91.6	73.3	46.3	43.3	58.2	74.1
Gender and age						
Male	85.8	67.6	39.6	31.3	65.6	71.9
5-9	76.2	48.8	25.4	15.5	62.8	56.3
10-14	92.1	80.0	49.0	41.7	67.4	82.2
Female	90.8	71.4	45.1	56.3	70.7	76.9
5-9	87.5	55.4	24.7	30.2	70.5	61.7
10-14	93.5	84.0	61.3	77.0	70.7	88.9
Orphan status						
Orphaned	90.5	75.2	44.7	48.9	63.4	78.3
Not-orphaned	87.6	67.8	41.9	42.6	69.1	73.0
Foster status						
Fostered	92.9	77.3	41.6	45.4	53.1	66.8
Not-fostered	87.4	67.3	42.6	42.6	71.2	74.6

Source :CWIQ 2006 Musoma DC

Table 5.16 - Child labour (age 5 to 14)

	Working	Main activity			Employer	
		Agriculture	Household	Other	Private	Household
Total	53.9	19.6	80.0	0.4	0.5	99.5
Cluster Location						
Accessible	54.5	19.9	79.4	0.7	0.9	99.1
Remote	53.1	19.2	80.8	0.0	0.0	100.0
Poverty Status						
Poor	54.0	16.0	83.8	0.2	0.2	99.8
Non-poor	53.8	23.8	75.5	0.7	0.9	99.1
Gender and age						
Male	53.6	20.6	78.5	0.8	0.6	99.4
5-9	30.5	7.8	92.2	0.0	0.0	100.0
10-14	100.0	28.5	70.2	1.3	1.0	99.0
Female	54.3	18.5	81.5	0.0	0.5	99.5
5-9	34.4	3.9	96.1	0.0	0.5	99.5
10-14	97.3	29.7	70.3	0.0	0.4	99.6
Orphan status						
Orphaned	77.5	21.2	76.7	2.1	1.6	98.4
Not-orphaned	50.5	19.5	80.5	0.0	0.3	99.7
Foster status						
Fostered	68.3	26.9	73.1	0.0	0.0	100.0
Not-fostered	51.3	18.3	81.3	0.4	0.7	99.3

Source :CWIQ 2006 Musoma DC

the share of working children by cluster location or poverty status. However, children from poor households are more likely to work for the household, while children from non-poor households are more likely to work in agriculture. The employer for most children is the household.

The main difference is given by the age breakdown. Roughly one third of children in the 5-9 cohorts were part of the working population, whereas virtually all the children in the 10-14 cohort were working at the time of the survey. In addition, the share working in agriculture increases dramatically for the older cohort.

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 78 and 51 percent, respectively. In turn, fostered children are more likely to be working than non-fostered children, but the difference is somewhat lower (68 and 51 percent). There is no remarkable difference in the main activity by orphan status, but fostered children are more likely to work in agriculture than non-fostered children.

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6 PERCEPTIONS ON WELFARE AND CHANGES BETWEEN THE COMMUNITIES

This chapter presents the perceptions on welfare status and changes in Musoma district. 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 to 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 32 percent of all households in the district reported a positive change in the economic situation of their community. 22 percent of the

population reported observing no changes in their community's economic situation. Even though the majority reported the community economic condition to have deteriorated (44 percent) only 9 percent reported the situation to be much worse while the rest reported it to be worse.

Looking at the overall community economic situation by household characteristics, it is observed that poverty status of the household does not show correlation with the perceived economic change. However, about a half (51 percent) the people living in remote clusters report a deterioration in their community's economic situation compared to 39 percent of those living in accessible clusters.

The percentage of households with seven or more members who reported worsening of their community's economic situation is significantly higher than that of households with one or two members at 53 and 33 percent respectively. Furthermore, there is a difference of only 5 percentage points between households owning no land and those owning six or more hectares of land who reported deterioration in their community's economic situation at 48 and 43 percent respectively. Similarly, the percentage of households owning no livestock who reported worsening conditions in their community's economic situation is slightly higher than that of households owning both small and large livestock at 46 and 42 percent respectively.

While 52 percent of households whose main income earner is self-employed in non-agricultural activities reported deterioration in their community's economic situation, the share for households whose main income earner belongs to the 'other' category is only 31 percent. Furthermore, 54 percent of households where the household head is single reported an improvement in the economic conditions of their communities

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compared to 26 percent of 'polygamous' households.

It is also observed that the percentage of households where the head has no education and reported deterioration in their community's economic conditions is 5 percentage points higher than that of households where the head has secondary education or more, at 35 and 30 percent respectively. Likewise, while 48 percent of male-headed households report

deterioration in the economic conditions of their communities, the share for female-headed households is 33 percent.

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	9.5	35.4	21.9	30.5	0.9	1.8	100.0
Cluster Location							
Accessible	6.9	33.4	24.4	32.9	1.5	0.8	100.0
Remote	12.9	38.1	18.6	27.2	0.0	3.2	100.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	4.4	28.7	27.3	35.5	0.0	4.1	100.0
3-4	5.0	39.0	25.7	27.4	2.2	0.8	100.0
5-6	8.3	29.5	28.6	30.3	1.1	2.2	100.0
7+	15.2	39.2	12.8	31.2	0.0	1.6	100.0
Area of land owned by the household							
None	8.1	39.9	26.2	22.9	0.0	2.9	100.0
< 1 ha	15.4	13.6	27.5	43.5	0.0	0.0	100.0
1-1.99 ha	13.0	41.5	20.0	23.8	1.7	0.0	100.0
2-3.99 ha	6.8	37.1	20.8	33.5	0.8	1.0	100.0
4-5.99 ha	8.9	36.7	20.2	31.1	0.0	3.1	100.0
6+ ha	11.9	31.1	23.4	27.3	2.3	3.9	100.0
Type of livestock owned by the household							
None	9.0	36.7	21.7	30.2	0.4	1.9	100.0
Small only	8.2	36.6	21.0	32.0	0.9	1.3	100.0
Large only	15.1	27.6	27.4	26.9	0.0	3.0	100.0
Both	12.9	29.7	22.2	29.4	3.7	2.2	100.0
Socio-economic Group							
Employee	4.6	42.1	17.2	26.2	4.6	5.3	100.0
Self-employed - agriculture	8.8	34.4	22.8	31.5	0.9	1.7	100.0
Self-employed - other	14.5	40.3	17.6	27.7	0.0	0.0	100.0
Other	6.3	26.5	29.8	31.1	0.0	6.4	100.0
Gender of the head of household							
Male	10.0	37.6	21.6	29.3	0.7	0.7	100.0
Female	7.6	27.8	23.1	34.5	1.3	5.6	100.0
Marital status of the head of household							
Single	0.0	25.1	20.9	54.0	0.0	0.0	100.0
Monogamous	12.0	36.0	21.8	30.2	0.0	0.0	100.0
Polygamous	6.9	50.2	16.3	23.6	1.1	1.9	100.0
Loose union	4.2	20.9	35.9	39.0	0.0	0.0	100.0
Widow/div/sep	9.0	26.9	21.4	32.8	3.0	6.9	100.0
Education level of the head of household							
None	8.7	28.5	25.0	33.1	0.0	4.7	100.0
Primary	10.4	38.3	20.5	29.0	0.8	1.0	100.0
Secondary +	2.4	32.1	24.4	35.6	5.4	0.0	100.0

Source :CWIQ 2006 Musoma DC

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	17.2	42.7	17.2	22.3	0.5	0.0	100.0
Cluster Location							
Accessible	17.0	36.7	18.6	26.8	0.9	0.0	100.0
Remote	17.5	50.6	15.4	16.5	0.0	0.0	100.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	26.3	40.7	16.8	16.2	0.0	0.0	100.0
3-4	15.1	37.5	19.9	27.5	0.0	0.0	100.0
5-6	11.1	43.8	20.7	23.3	1.0	0.0	100.0
7+	20.3	46.3	13.0	19.8	0.6	0.0	100.0
Area of land owned by the household							
None	18.2	36.3	19.7	25.8	0.0	0.0	100.0
< 1 ha	34.1	19.6	14.8	31.6	0.0	0.0	100.0
1-1.99 ha	24.3	45.3	16.5	12.3	1.6	0.0	100.0
2-3.99 ha	17.5	43.2	16.0	23.3	0.0	0.0	100.0
4-5.99 ha	10.8	50.5	16.2	21.1	1.4	0.0	100.0
6+ ha	10.5	43.4	21.7	24.4	0.0	0.0	100.0
Type of livestock owned by the household							
None	18.4	43.2	19.5	18.5	0.5	0.0	100.0
Small only	15.3	41.4	15.7	26.8	0.7	0.0	100.0
Large only	15.3	54.5	7.4	22.7	0.0	0.0	100.0
Both	18.3	36.1	15.9	29.7	0.0	0.0	100.0
Socio-economic Group							
Employee	2.7	30.4	21.8	45.2	0.0	0.0	100.0
Self-employed - agric	17.1	43.9	19.1	19.3	0.7	0.0	100.0
Self-employed - other	19.3	43.3	10.6	26.9	0.0	0.0	100.0
Other	24.4	38.2	13.4	24.0	0.0	0.0	100.0
Gender of the head of household							
Male	14.7	45.7	17.3	22.0	0.3	0.0	100.0
Female	26.3	32.1	17.1	23.6	1.0	0.0	100.0
Marital status of the head of household							
Single	0.0	71.2	0.0	28.8	0.0	0.0	100.0
Monogamous	14.7	40.1	19.3	25.4	0.6	0.0	100.0
Polygamous	11.7	54.1	17.0	17.2	0.0	0.0	100.0
Loose union	25.7	46.6	7.7	20.0	0.0	0.0	100.0
Widow/div/sep	25.4	34.5	18.0	21.1	1.0	0.0	100.0
Education level of the head of household							
None	22.9	37.4	16.0	23.7	0.0	0.0	100.0
Primary	15.5	45.7	16.9	21.4	0.4	0.0	100.0
Secondary +	12.8	31.1	25.9	26.8	3.5	0.0	100.0

Source :CWIQ 2006 Musoma DC

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. Nearly a quarter (24

percent) of the households reported an improvement in their economic conditions, while 17 percent reported same conditions compared to the year preceding the survey.

While 69 percent of those living in remote clusters reported deterioration of the households' economic situation, the share for accessible clusters was 53 percent.

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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	21.6	47.8	28.1	2.4	100.0
Cluster Location					
Accessible	25.5	51.3	22.3	0.8	100.0
Remote	16.5	43.2	35.8	4.6	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	17.7	53.8	24.9	3.5	100.0
3-4	25.4	47.2	26.6	0.8	100.0
5-6	18.5	52.5	27.6	1.5	100.0
7+	22.4	43.1	30.6	3.9	100.0
Area of land owned by the household					
None	39.4	35.7	24.9	0.0	100.0
< 1 ha	16.1	31.8	48.9	3.2	100.0
1-1.99 ha	16.2	53.8	30.1	0.0	100.0
2-3.99 ha	16.8	53.1	25.6	4.5	100.0
4-5.99 ha	24.2	46.9	26.8	2.1	100.0
6+ ha	26.4	45.1	27.2	1.3	100.0
Type of livestock owned by the household					
None	18.1	46.4	31.7	3.7	100.0
Small only	26.1	47.7	24.9	1.4	100.0
Large only	27.0	43.1	29.8	0.0	100.0
Both	23.5	59.4	17.1	0.0	100.0
Socio-economic Group					
Employee	36.5	50.8	12.6	0.0	100.0
Self-employed - agriculture	18.9	47.3	30.6	3.2	100.0
Self-employed - other	28.9	49.5	20.6	1.0	100.0
Other	17.6	45.8	36.6	0.0	100.0
Gender of the head of household					
Male	23.7	47.5	25.7	3.1	100.0
Female	14.4	49.0	36.6	0.0	100.0
Marital status of the head of household					
Single	54.0	25.1	20.9	0.0	100.0
Monogamous	24.1	43.8	30.7	1.3	100.0
Polygamous	27.1	49.1	19.8	4.0	100.0
Loose union	15.3	58.5	18.0	8.3	100.0
Widow/div/sep	12.0	51.8	35.3	0.9	100.0
Education level of the head of household					
None	14.2	43.4	41.6	0.8	100.0
Primary	22.9	49.6	24.4	3.0	100.0
Secondary +	36.8	45.8	14.2	3.3	100.0

Source :CWIQ 2006 Musoma DC

Poverty status of the household does not show correlation with the perceived household economic situation.

The percentage of households with seven or more members who reported an improvement in the economic conditions of their households is higher than that of households with one or two members at 22 and 16 percent respectively. Furthermore, while 19 percent of households owning no

land report much worse economic conditions of their households, the share for households owning six or more hectares of land is 11 percent. Desegregation of the data further shows that 68 percent of households owning large livestock express more negative views on their households' economic conditions compared to 54 percent of households owning both small and large livestock.

The percentage of households in the employee category who reported an improvement in their households' economic conditions is more than twice as high as that of households whose main income earner is self-employed in agricultural activities at 48 and 21 percent respectively. Furthermore, while 71 percent of households where the head is single reported deterioration in their household's economic conditions, the share for 'monogamous' households is 55 percent. 26 percent of female-headed households report much worse economic conditions compared to 15 percent of male-headed households. Similarly, the percentage of households reporting much worse economic conditions is higher for households where the head has no education than households where the head has secondary education or more at 23 and 14 percent respectively.

6.2 Self-reported Difficulties in Satisfying Household Needs

This section analyses the difficulties households faced in satisfying household needs during the year prior to the survey. These household needs are such as 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.

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, 68 percent of the district's households never/seldom experience food shortages while the remaining population experience food shortages frequently (often/always). While nearly a quarter (24 percent) of households in accessible clusters had never experienced food shortages, the share for households in remote clusters is 17 percent.

38 percent of landless households never experienced problems satisfying food needs compared to 28 percent of households owning six or more hectares of land. Furthermore, while 72 percent of households with one or two members

never/seldom experience food shortages, the share for households with seven or more members is 65 percent. There is also some correlation between livestock ownership and satisfying food needs. While 36 percent of households owning no livestock frequently experienced food shortages, the share for households owning both small and large livestock is 16 percent.

The socio-economic group of the household also shows some correlation with the household's ability to satisfy its food needs. While 39 percent of households belonging to the 'other' socio-economic group reported frequent problems satisfying food needs, the share for households whose main income earner is an employee is only 14 percent. Furthermore, 54 percent of households where the head is single had never experienced food shortages compared to 11 percent of households where the head is widowed/divorced or separated.

The breakdown by gender of the household head shows that female-headed households reported having food shortages more frequently than male-headed households as 38 percent of female-headed households experienced frequent food shortages compared to 30 percent of male-headed households. Likewise, while 44 percent of households where the head has no education experienced food shortages frequently, the share for households where the head has secondary education or more is 19 percent.

8.2.2 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, 93 percent of the households in the district reported that they never had problems paying school fees and only 3 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, the secondary school enrolment rates are very low (for more details, see chapter 3).

Poverty status and cluster location do not show strong correlation with the ability to pay school fees. However, smaller households find problems paying school

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fees less frequently than larger households. While 98 percent of households with one or two members never had problems with paying school fees, the share for households with seven or more members is 87 percent. Furthermore, 6 percent of households with no land often experienced problems with paying school fees compared to 2 percent

of households owning six or more hectares of land. Similarly, while 5 percent of households with no livestock reported often experiencing problems with paying school fees, the share for households owning large livestock and those owning both small and large livestock is virtually

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	93.5	3.4	3.0	0.2
Cluster Location				
Accessible	93.0	3.0	4.0	0.0
Remote	94.0	3.8	1.7	0.4
Poverty Status				
Poor	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0
Household size				
1-2	97.6	0.0	2.4	0.0
3-4	98.0	1.1	0.9	0.0
5-6	95.2	1.5	3.3	0.0
7+	87.7	7.4	4.4	0.5
Area of land owned by the household				
None	92.1	3.1	4.8	0.0
< 1 ha	95.8	0.0	4.2	0.0
1-1.99 ha	98.6	1.4	0.0	0.0
2-3.99 ha	93.3	2.4	3.8	0.5
4-5.99 ha	90.2	6.6	3.3	0.0
6+ ha	93.2	5.0	1.8	0.0
Type of livestock owned by the household				
None	93.4	1.6	5.0	0.0
Small only	93.1	5.3	1.0	0.6
Large only	89.3	10.7	0.0	0.0
Both	97.9	2.1	0.0	0.0
Socio-economic Group				
Employee	78.5	6.3	15.2	0.0
Self-employed - agriculture	95.1	3.0	1.9	0.0
Self-employed - other	94.4	2.6	2.1	1.0
Other	84.8	7.6	7.6	0.0
Gender of the head of household				
Male	93.7	3.8	2.3	0.2
Female	92.6	1.9	5.4	0.0
Marital status of the head of household				
Single	71.2	0.0	28.8	0.0
Monogamous	94.2	4.4	0.9	0.4
Polygamous	93.9	3.3	2.8	0.0
Loose union	93.7	1.5	4.9	0.0
Widow/div/sep	92.3	2.0	5.7	0.0
Education level of the head of household				
None	91.9	2.6	4.7	0.7
Primary	94.0	3.8	2.2	0.0
Secondary +	93.6	2.2	4.2	0.0

Source :CWIQ 2006 Musoma DC

Disaggregating of the data further shows that 95 percent of households whose main income earner is self-employed in agricultural activities never had problems with paying school fees compared to 81 percent of 'employees' households.

The percentage of female-headed households who reported often experiencing problems paying school fees is twice as high that of male-headed households at 6 and 3 percent respectively. Likewise, while 29 percent of households where the head is single often had problems paying school fees, the share for 'monogamous' households is only 1 percent. Lastly, households where the household head has no education had problems paying school fees more often than households where the head has primary education.

8.2.3 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. Almost all (98 percent) households in the district reported that they never had problems paying house rent. However, it is noticeable that while 29 percent of households where the head is single had problems paying house rent more often, the share for 'monogamous' 'polygamous' and 'loose union' households is virtually null. Similarly, 11 percent of households whose main income earner is an employee and 5 percent of households where the head has secondary education or more reported that they often had problems paying house rent. It is also observed that 13 percent of households owning no land reported that they seldom had problems with paying house rent. Other household characteristics such as cluster location, poverty status, household size, livestock ownership and gender 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 almost similar to those of paying house rent. Nearly all (99 percent) households in the district do not face problems with paying utility bills. However, it is observed that 29 percent of households where the household head is single and 11 percent of 'employees' households claim having problems with paying utility bills often. Likewise, 5 percent of households where the household head has secondary education or more and 4 percent of households owning one hectare of land reported often having problems paying utility bills. Other selected household characteristics such as cluster location, poverty status, household size, livestock ownership and gender do not show strong correlation with the ability to pay utility bills.

8.2.5 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. 78 percent of the households reported that they never/seldom experience problems paying for healthcare in the year prior to the survey. Desegregation of the data further shows that while 86 percent of households located in accessible clusters never/seldom experienced problems paying for healthcare; the share for households located in remote clusters is 68 percent. Poverty status of the household does not show correlation with the ability to pay for healthcare.

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	98.2	1.3	0.5	0.0	100.0
Cluster Location					
Accessible	96.8	2.3	0.9	0.0	100.0
Remote	100.0	0.0	0.0	0.0	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	97.6	0.0	2.4	0.0	100.0
3-4	96.1	3.9	0.0	0.0	100.0
5-6	98.8	1.2	0.0	0.0	100.0
7+	99.4	0.0	0.6	0.0	100.0
Area of land owned by the household					
None	86.2	11.2	2.6	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	97.0	1.5	1.4	0.0	100.0
6+ ha	100.0	0.0	0.0	0.0	100.0
Type of livestock owned by the household					
None	96.6	2.5	0.9	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	90.1	0.0	9.9	0.0	100.0
Self-employed - agriculture	98.9	1.1	0.0	0.0	100.0
Self-employed - other	97.0	3.0	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	99.3	0.4	0.3	0.0	100.0
Female	94.3	4.6	1.1	0.0	100.0
Marital status of the head of household					
Single	71.2	0.0	28.8	0.0	100.0
Monogamous	98.8	1.2	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	95.4	3.5	1.1	0.0	100.0
Education level of the head of household					
None	97.0	3.0	0.0	0.0	100.0
Primary	99.2	0.5	0.3	0.0	100.0
Secondary +	91.6	4.2	4.2	0.0	100.0

Source :CWIQ 2006 Musoma DC

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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	99.2	0.3	0.5	0.0	100.0
Cluster Location					
Accessible	98.6	0.5	1.0	0.0	100.0
Remote	100.0	0.0	0.0	0.0	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	97.6	0.0	2.4	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+	98.5	0.7	0.7	0.0	100.0
Area of land owned by the household					
None	100.0	0.0	0.0	0.0	100.0
< 1 ha	95.8	0.0	4.2	0.0	100.0
1-1.99 ha	98.0	2.0	0.0	0.0	100.0
2-3.99 ha	100.0	0.0	0.0	0.0	100.0
4-5.99 ha	98.6	0.0	1.4	0.0	100.0
6+ ha	100.0	0.0	0.0	0.0	100.0
Type of livestock owned by the household					
None	98.5	0.5	1.0	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	89.5	0.0	10.5	0.0	100.0
Self-employed - agriculture	100.0	0.0	0.0	0.0	100.0
Self-employed - other	98.6	1.4	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	99.3	0.3	0.3	0.0	100.0
Female	98.8	0.0	1.2	0.0	100.0
Marital status of the head of household					
Single	71.2	0.0	28.8	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	97.4	1.3	1.3	0.0	100.0
Education level of the head of household					
None	100.0	0.0	0.0	0.0	100.0
Primary	99.2	0.4	0.4	0.0	100.0
Secondary +	95.8	0.0	4.2	0.0	100.0

Source :CWIQ 2006 Musoma DC

More than a quarter (27 percent) of households with seven or more members reported often/always having problems paying for healthcare compared to 13 percent of households with one or two members. Similarly, while 23 percent of households owning six or more hectares of land often/always experienced problems paying for healthcare, the share for households owning no land is only 11 percent.

Furthermore, 43 percent of households owning no livestock ever had problems paying for health care compared to 37 percent of those owning both small and large livestock. Similarly, while the majority (65 percent) of households whose main income earner is an employee never had problems paying for healthcare; the share for households belonging to the 'other' socio-economic group is around 50 percent. Likewise 50 percent of households where the household head is single never had problems paying for healthcare compared to 35 percent of households where the household head is widowed/divorced/separated. It is also observed that 21 percent of households where the household head is single often had problems paying for healthcare compared to 5 percent of 'loose union' households.

37 percent of female-headed households never had problems paying for healthcare, while the share for male-headed households is 44 percent. On the other hand, 25 percent of household heads with no education often/always had problems paying for healthcare compared to 9 percent of household heads with secondary education or more.

6.3 Assets and Household Occupancy Status

This section discusses ownership of selected assets and household occupancy status. These assets are as 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, the survey did not use any further methods 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, 87 percent of the district's households own their dwellings while 92 percent owns some land. 30 percent of all

households own small livestock while only 6 percent of all households own large livestock. While 40 percent of all households own a bicycle, the share for households owning a motorcycle is 1 percent.

Table 6.9 shows the percent distribution of households by occupancy status. 96 percent of households located in remote clusters own their dwellings compared to 81 percent of households located in accessible clusters. Disaggregating of the data shows that 94 percent of households with seven or more members own their dwellings compared to 68 percent of households with one or two members. Furthermore, while all households whose main income earner belongs to the 'other' socio-economic group own their dwellings, the share for households whose main income earner is an employee is 57 percent. Disaggregating of the data further shows that while 89 percent of male-headed households own their dwellings, the share for female-headed households is 83 percent. It is also observed that 46 percent of male-headed households own a bicycle compared to only 18 percent of female-headed households. Likewise, 46 percent of households with seven or more members own a bicycle compared to only 24 percent of households with one or two members.

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 do not have any documentation to verify their occupancy status. Only 7 percent of the households possess formal occupancy documentation, which include a title deed, renting contract or payment receipt. 82 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.

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	42.9	36.1	18.2	2.8	100.0
Cluster Location					
Accessible	48.0	39.1	11.2	1.7	100.0
Remote	36.2	32.1	27.4	4.2	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	63.8	23.0	9.8	3.4	100.0
3-4	46.7	37.6	15.1	0.5	100.0
5-6	34.8	44.6	16.5	4.1	100.0
7+	39.4	33.0	24.3	3.3	100.0
Area of land owned by the household					
None	53.8	37.2	6.8	2.2	100.0
< 1 ha	33.0	43.7	19.7	3.6	100.0
1-1.99 ha	37.7	41.9	19.3	1.1	100.0
2-3.99 ha	43.9	36.8	15.7	3.7	100.0
4-5.99 ha	44.8	27.1	24.6	3.6	100.0
6+ ha	40.3	36.6	21.9	1.3	100.0
Type of livestock owned by the household					
None	43.6	36.1	17.0	3.3	100.0
Small only	43.6	34.5	20.8	1.1	100.0
Large only	41.6	32.6	14.8	11.0	100.0
Both	37.1	43.6	19.4	0.0	100.0
Socio-economic Group					
Employee	67.5	18.8	13.7	0.0	100.0
Self-employed - agriculture	37.2	40.5	19.3	2.9	100.0
Self-employed - other	53.7	26.7	16.7	2.9	100.0
Other	53.3	29.2	14.3	3.2	100.0
Gender of the head of household					
Male	44.2	35.0	17.8	3.0	100.0
Female	38.4	39.8	19.8	1.9	100.0
Marital status of the head of household					
Single	50.3	28.8	20.9	0.0	100.0
Monogamous	46.9	29.9	19.1	4.1	100.0
Polygamous	42.3	37.2	19.5	1.0	100.0
Loose union	38.1	53.7	8.2	0.0	100.0
Widow/div/sep	36.3	41.3	19.4	3.0	100.0
Education level of the head of household					
None	37.5	38.2	22.0	2.3	100.0
Primary	44.1	34.9	17.7	3.3	100.0
Secondary +	51.4	40.3	8.2	0.0	100.0

Source :CWIQ 2006 Musoma DC

6.4.1 Agricultural Inputs

The survey collected information on agricultural practices. Data includes information regarding 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

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Table 6.8: Percentage of households owning certain assets

	Home	Land	Livestock			Motor- cycle	Bicycle	Wheel barrow	
			Small	Large	Both				
Total	86.2	90.7	30.5	6.4	9.3	0.3	0.8	41.2	1.3
Cluster Location									
Accessible	79.1	85.7	29.9	5.0	8.3	0.5	1.3	38.3	1.9
Remote	95.6	97.3	31.3	8.3	10.7	0.0	0.0	44.9	0.5
Poverty Status									
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size									
1-2	67.7	79.7	15.5	5.8	1.9	0.0	0.0	23.7	2.1
3-4	79.2	83.5	22.4	3.7	8.7	0.0	0.0	31.9	0.0
5-6	90.8	94.3	35.1	6.8	9.0	0.0	1.8	49.7	1.8
7+	93.8	96.8	37.7	8.3	12.3	0.8	0.8	47.2	1.6
Socio-economic Group									
Employee	57.1	70.6	32.0	0.0	7.8	0.0	9.1	57.7	5.2
Self-employed - agriculture	89.3	95.2	30.8	7.4	9.5	0.0	0.0	40.5	0.7
Self-employed - other	78.5	77.0	32.4	5.5	9.0	1.6	1.5	44.8	2.9
Other	100.0	100.0	19.8	3.2	9.8	0.0	0.0	23.3	0.0
Gender of the head of household									
Male	87.4	92.7	32.8	7.8	11.0	0.4	1.0	47.5	1.7
Female	82.0	83.9	22.5	1.6	3.3	0.0	0.0	19.1	0.0

Source :CWIQ 2006 Musoma DC

Table 6.9: Percent distribution of households by occupancy status

	Own	Rent	Free	Other	Total
Total	86.2	9.0	4.7	0.0	100.0
Cluster Location					
Accessible	79.1	14.7	6.2	0.0	100.0
Remote	95.6	1.7	2.7	0.0	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	67.7	19.7	12.6	0.0	100.0
3-4	79.2	16.9	3.9	0.0	100.0
5-6	90.8	7.1	2.1	0.0	100.0
7+	93.8	1.5	4.7	0.0	100.0
Socio-economic Group					
Employee	57.1	34.7	8.2	0.0	100.0
Self-employed - agriculture	89.3	5.5	5.2	0.0	100.0
Self-employed - other	78.5	18.1	3.4	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	87.4	8.3	4.2	0.0	100.0
Female	82.0	11.6	6.5	0.0	100.0

Source :CWIQ 2006 Musoma DC

complimented by Table 6.12, which shows the main source of agricultural inputs.

41 percent of all farmers apply agricultural inputs to their farms and the majority (60 percent) of those who use farm inputs apply fertilizers. The percentage of households located in remote clusters

using agricultural inputs is higher than that of households located in accessible clusters, at 44 and 38 percent respectively.

Desegregations of the data further shows that as the number of household member's increases, the usage of agricultural inputs also increases. Furthermore, while 53 percent of households where the main income earner is self-employed in non-agricultural activities use agricultural inputs, the share for households belonging to the 'other' socio-economic group is 23 percent. Likewise, use of agricultural inputs in male-headed households is higher than in female-headed households at 46 and 21 percent respectively.

Most households that use agricultural inputs obtain them by preparing them themselves (56 percent) and in second place purchasing them at an open market (34 percent). While 7 percent of the households get their inputs from cooperatives, 2 percent obtain them from government and none reports donor agencies as their main source.

Data also shows that the percentage of households located in accessible clusters who purchase agricultural inputs at an open market is higher than that of households located in remote clusters at 37 and 32 percent respectively. Likewise, the percentage of households with one or

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	0.8	4.9	1.4	11.5	81.4	100.0	7.1
Cluster Location							
Accessible	1.5	8.2	2.5	10.8	77.1	100.0	12.1
Remote	0.0	0.4	0.0	12.5	87.1	100.0	0.4
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	0.0	17.3	0.0	3.4	79.4	100.0	17.3
3-4	1.0	8.2	3.1	9.8	77.9	100.0	12.3
5-6	0.0	2.8	1.1	10.3	85.8	100.0	3.9
7+	1.5	0.0	0.9	16.2	81.4	100.0	2.4
Socio-economic Group							
Employee	5.3	24.7	0.0	12.8	57.2	100.0	30.0
Self-employed - agric	0.0	2.4	0.9	10.3	86.5	100.0	3.3
Self-employed - other	2.9	10.0	4.2	11.6	71.3	100.0	17.1
Other	0.0	0.0	0.0	24.2	75.8	100.0	0.0
Gender of the head of household							
Male	0.7	5.3	1.1	12.3	80.5	100.0	7.1
Female	1.2	3.3	2.5	8.5	84.5	100.0	7.0

Source :CWIQ 2006 Musoma DC

Table 6.11: Percent distribution of households using agriculture inputs and the percentage using certain inputs

	% of hhs using	Fertilizer	Improved seedling	Fingerlings	Hooks and nets	Insecticides	Other
Total	41.3	60.7	24.2	0.0	26.4	5.3	0.7
Cluster Location							
Accessible	39.1	57.6	23.7	0.0	26.8	7.4	1.2
Remote	44.2	64.3	24.9	0.0	25.9	2.9	0.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	29.5	51.6	24.3	0.0	34.9	0.0	0.0
3-4	34.4	58.1	14.5	0.0	34.2	6.1	0.0
5-6	43.6	69.2	28.1	0.0	22.1	8.8	0.0
7+	48.2	58.3	26.7	0.0	23.6	3.7	1.5
Socio-economic Group							
Employee	43.1	34.9	29.4	0.0	23.5	0.0	12.2
Self-employed - agric	39.4	68.9	26.1	0.0	13.0	4.7	0.0
Self-employed - other	54.0	41.2	19.6	0.0	66.1	8.6	0.0
Other	21.6	86.4	13.6	0.0	0.0	2.5	0.0
Gender of the head of household							
Male	46.8	58.4	23.9	0.0	28.6	4.7	0.0
Female	22.1	77.6	26.9	0.0	10.1	10.0	5.5

Source :CWIQ 2006 Musoma DC

1. Base for column 1 is all households. For columns 2 to 7 is households using agricultural inputs

two members who purchase agricultural inputs at an open market is 21 percentage points higher than that of households with seven or more members, at 48 and 27 percent respectively.

While 73 percent of households where the main income earner is self-employed in non-agricultural activities purchase their agricultural inputs at an open market, the share of households belonging to the

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Table 6.12: Percent distribution of households using agriculture inputs by the main source of the inputs

	Open market	Government	Donor agency	Coop.	Other	Total
Total	35.3	2.2	0.0	6.4	56.1	100.0
Cluster Location						
Accessible	39.3	2.5	0.0	4.0	54.2	100.0
Remote	30.8	1.8	0.0	9.2	58.2	100.0
Poverty Status						
Poor	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0
Household size						
1-2	48.2	0.0	0.0	9.4	42.4	100.0
3-4	36.5	2.1	0.0	2.9	58.4	100.0
5-6	39.1	1.6	0.0	2.7	56.6	100.0
7+	30.5	3.0	0.0	9.9	56.6	100.0
Socio-economic Group						
Employee	46.9	0.0	0.0	0.0	53.1	100.0
Self-employed - agriculture	21.4	2.7	0.0	8.8	67.2	100.0
Self-employed - other	74.7	0.0	0.0	1.9	23.4	100.0
Other	0.0	13.6	0.0	2.5	83.9	100.0
Gender of the head of household						
Male	37.9	2.0	0.0	7.2	52.9	100.0
Female	15.0	4.0	0.0	0.0	80.9	100.0

Source :CWIQ 2006 Musoma DC

1. Base is households using agricultural inputs

'other' socio-economic group is virtually. Furthermore, 38 percent of male-headed households purchase their agricultural inputs at an open market compared to 9 percent of female-headed households. On the other hand, while 87 percent of female-headed households obtain agricultural inputs by preparing them themselves, the share for male-headed households is only 52 percent.

6.4.2 Landholding

Table 6.13 shows the percent distribution of households by the area of land owned. Around 29 percent of households own less than two acres of land (including 8 percent of landless households). 37 percent owns between two and four acres and 34 percent owns four or more acres.

Landless households are more common in accessible clusters and households owning

large portions of land are more common in remote clusters.

Regarding household size, while 20 percent of households with one or two members are landless, the share for households with seven or more members is only 3 percent. In contrast, larger households seem to own larger landholdings more frequently than households with less members.

While households where the main income earner is an employee reported the highest share of landless households (32 percent), the share for households where the main income earner belongs to the 'other' socio-economic group is virtually null. Finally, male-headed households have larger landholdings (4 or more acres) compared to female-headed households at 38 and 20 percent respectively.

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	9.3	6.5	13.5	36.6	18.8	15.3	100.0
Cluster Location							
Accessible	14.3	8.9	12.5	38.5	15.3	10.5	100.0
Remote	2.7	3.4	14.9	34.0	23.5	21.6	100.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	20.3	7.4	16.6	42.3	9.3	4.1	100.0
3-4	16.5	6.9	18.3	32.5	18.4	7.4	100.0
5-6	5.7	4.7	15.4	41.9	12.8	19.5	100.0
7+	3.2	7.2	7.8	33.9	26.4	21.5	100.0
Socio-economic Group							
Employee	29.4	5.3	19.5	37.8	5.3	2.7	100.0
Self-employed - agriculture	4.8	4.7	12.2	38.8	21.4	18.1	100.0
Self-employed - other	23.0	12.8	17.0	27.3	11.9	7.9	100.0
Other	0.0	8.4	12.9	38.8	22.3	17.5	100.0
Gender of the head of household							
Male	7.3	6.0	12.8	35.9	18.9	19.1	100.0
Female	16.1	8.3	16.2	38.9	18.6	1.8	100.0

Source :CWIQ 2006 Musoma DC

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	84.3	2.5	8.7	2.6	1.7	0.2	100.0
Cluster Location							
Accessible	86.8	1.9	6.1	4.0	1.2	0.0	100.0
Remote	81.0	3.3	12.0	0.9	2.3	0.5	100.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	92.3	0.0	5.2	2.5	0.0	0.0	100.0
3-4	87.6	3.0	7.0	1.7	0.7	0.0	100.0
5-6	84.3	1.8	9.9	1.7	1.5	0.8	100.0
7+	79.4	3.5	10.0	4.0	3.1	0.0	100.0
Socio-economic Group							
Employee	92.2	0.0	7.8	0.0	0.0	0.0	100.0
Self-employed - agric	83.1	2.8	9.9	2.3	1.5	0.3	100.0
Self-employed - other	85.6	1.0	7.0	4.1	2.4	0.0	100.0
Other	87.0	5.7	0.5	3.6	3.2	0.0	100.0
Gender of the head of household							
Male	81.2	2.5	10.4	3.4	2.2	0.3	100.0
Female	95.1	2.4	2.4	0.0	0.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

6.4.3 Cattle Ownership

Table 6.14 shows the percent distribution of households by the number of cattle owned. The majority (84 percent) of households owns no cattle at all, and only

5 percent owns more than 10 heads of cattle. Households in accessible clusters are more likely to own no cattle as well as households with one or two members. In contrast, households with seven or more members are more likely to have some cattle (between 2 and 10 heads) compared

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Table 6.15: Percent distribution of households by the perception of the crimes 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	5.5	12.8	36.2	38.3	6.7	0.4	100.0
Cluster Location							
Accessible	5.3	11.5	37.0	40.1	5.3	0.8	100.0
Remote	5.7	14.6	35.2	35.9	8.6	0.0	100.0
Poverty Status							
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size							
1-2	11.8	7.6	35.1	37.1	7.0	1.4	100.0
3-4	2.8	13.0	42.3	31.8	9.0	1.1	100.0
5-6	3.8	16.0	33.6	43.9	2.6	0.0	100.0
7+	6.6	12.0	34.1	39.4	7.9	0.0	100.0
Area of land owned by the household							
None	5.6	9.2	52.9	29.4	2.9	0.0	100.0
< 1 ha	2.8	19.1	38.1	34.1	3.6	2.4	100.0
1-1.99 ha	2.8	14.4	40.5	34.8	7.5	0.0	100.0
2-3.99 ha	6.2	11.3	31.9	44.5	6.1	0.0	100.0
4-5.99 ha	8.7	10.0	32.4	39.1	8.3	1.5	100.0
6+ ha	3.4	18.1	36.7	32.8	9.1	0.0	100.0
Type of livestock owned by the household							
None	4.1	9.4	40.7	40.8	4.8	0.3	100.0
Small only	7.7	16.7	33.2	35.0	6.5	0.9	100.0
Large only	7.4	14.8	32.2	33.3	12.3	0.0	100.0
Both	4.8	18.8	23.3	38.2	14.9	0.0	100.0
Socio-economic Group							
Employee	0.0	14.3	38.8	46.9	0.0	0.0	100.0
Self-employed - agriculture	5.7	10.8	37.3	37.9	7.9	0.4	100.0
Self-employed - other	5.1	21.2	33.2	33.4	6.3	0.8	100.0
Other	9.2	8.6	31.3	50.8	0.0	0.0	100.0
Gender of the head of household							
Male	4.9	13.7	33.4	40.9	6.8	0.2	100.0
Female	7.4	9.8	46.2	29.0	6.3	1.3	100.0
Marital status of the head of household							
Single	0.0	0.0	25.1	74.9	0.0	0.0	100.0
Monogamous	5.0	10.9	40.9	36.0	7.1	0.0	100.0
Polygamous	5.4	23.2	28.0	40.7	2.7	0.0	100.0
Loose union	7.9	8.9	15.0	54.2	12.4	1.6	100.0
Widow/div/sep	5.8	9.4	43.8	32.3	7.3	1.4	100.0
Education level of the head of household							
None	5.9	16.2	36.1	35.3	5.4	1.1	100.0
Primary	5.5	12.0	35.9	39.2	7.2	0.2	100.0
Secondary +	4.2	7.8	40.3	41.1	6.6	0.0	100.0

Source :CWIQ 2006 Musoma DC

to households with one or two members, at 10 and 5 percent respectively. Finally, while 95 percent of female-headed households own no cattle, the share of male-headed households is 81 percent.

6.5 Perception of Crime and Security in the Community

This section gives an overview of how the district 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

47 percent the households reported it was improving, 36 percent said it was the same while 18 percent reported it was deteriorating. The percentage of households located in remote clusters who reported the current crime and security situation as worsening is higher than that of households located in accessible clusters at 21 and 15 percent respectively.

While 49 percent of households with seven or more members reported an improvement in the current crime and security situation, the share for households with one or two members is 44 percent. Similarly, 44 percent of households owning six or more hectares of land reported the current crime and security situation as improving compared to 36 percent of landless households. While 25 percent of households owning both small and large livestock reported deterioration in the current crime and security situation, the share for households owning no livestock is 13 percent.

Furthermore, 50 percent of male-headed households reported the current crime and security situation as improving compared to 36 percent of female-headed households. Similarly, while three quarters (75 percent) of households where the household head is single reported an improvement in the current crime and security situation, the share for households where the head is widowed/divorced/separated is 40 percent. On the other hand, while 10 percent of households where the main income earner belongs to the 'other' category reported a much worse crime and security situation, the share of households where the main income earner is an employee is virtually null. Lastly, the percentage of households where the head has no education and reported deterioration of the current crime and security situation is higher than that of household heads with secondary education or more, at 20 and 8 percent respectively.

6.6 Household Income Contributions

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

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

	Principal contributor of income				Total
	Head	Spouse	Child	Other	
Total	81.0	11.0	6.0	1.9	100.0
Cluster Location					
Accessible	84.7	10.5	3.6	1.2	100.0
Remote	76.2	11.7	9.1	3.0	100.0
Poverty Status					
Poor	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0
Household size					
1-2	81.0	9.9	0.0	9.1	100.0
3-4	84.6	8.7	4.9	1.8	100.0
5-6	78.0	14.8	6.5	0.7	100.0
7+	80.6	10.4	8.3	0.7	100.0
Socio-economic Group					
Employee	97.4	0.0	2.6	0.0	100.0
Self-employed - agric	83.7	9.9	4.8	1.6	100.0
Self-employed - other	90.5	2.4	7.1	0.0	100.0
Other	7.9	60.2	18.6	13.2	100.0
Gender of the head of household					
Male	82.5	12.8	3.9	0.9	100.0
Female	76.0	5.0	13.3	5.7	100.0

Source :CWIQ 2006 Musoma DC

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 (80 percent) of households the head is the main contributor.

84 percent of households located in accessible clusters reported the household head as the main income contributor compared to 75 percent of households located in remote clusters.

While 8 percent of households with seven or more members reported children as the main income contributor, the share for households with one or two members is virtually. Furthermore, almost all (97 percent) households belonging to the 'employee' category reported the head as the main income contributor compared to only 9 percent of households belonging to the 'other' category.

The breakdown by gender of the household head shows that up to 14 percent of male-headed households reported the spouse as the main income contributor compared to 5 percent of female-headed households.

6.7 Other Household Items

Table 6.17 shows the percentage distribution of households owning selected household items. 91 percent of households

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own at least one mattress or bed, 63 percent owns a radio, 48 percent owns a watch or clock and 23 percent owns an electric iron. Although no household owns a fixed line phone, 9 percent owns a mobile phone. Households in accessible clusters have higher rates of ownership in almost every selected item.

The breakdown by household size shows that the shares of ownership tend to be larger for larger households and for households headed by males. In addition, 'employees' and 'self-employed in non-agricultural activities' show higher rates of ownership in most of the selected household items than the other socio-economic groups.

Table 6.17: Percent distribution of households ownin selected household items

	Iron	Refrigerator	Sewing machine	Modern stove	Mattress or bed	Watch or clock	Radio	Televison	line phone	Mobile phone
Total	22.0	1.0	3.5	10.3	91.2	48.3	63.0	1.9	0.0	9.0
Cluster Location										
Accessible	26.1	1.8	3.2	15.5	95.3	53.2	65.6	3.1	0.0	14.4
Remote	16.7	0.0	4.0	3.6	85.8	41.9	59.7	0.3	0.0	1.8
Poverty Status										
Poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-poor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household size										
1-2	18.0	2.4	0.0	11.6	85.2	39.3	56.4	0.0	0.0	13.4
3-4	23.6	0.0	4.4	9.2	91.5	43.3	63.1	1.0	0.0	7.5
5-6	21.8	1.8	1.4	11.5	91.7	48.2	67.2	3.4	0.0	8.9
7+	22.3	0.8	5.4	10.0	92.5	54.9	62.1	2.0	0.0	8.7
Socio-economic Group										
Employee	45.5	14.3	4.6	20.8	100.0	78.6	75.9	17.0	0.0	41.8
Self-employed - agric	19.2	0.0	2.6	7.9	89.0	44.8	59.6	0.2	0.0	4.9
Self-employed - other	25.4	1.5	7.8	12.8	100.0	56.8	78.6	4.5	0.0	18.0
Other	23.8	0.0	0.0	21.7	81.5	36.3	42.6	0.0	0.0	0.0
Gender of the head of household										
Male	22.7	1.0	3.3	10.5	92.8	52.7	68.7	2.4	0.0	9.7
Female	19.7	1.2	4.2	9.8	85.5	33.1	43.3	0.0	0.0	6.5

Source :CWIQ 2006 Musoma DC

7 HOUSEHOLD AMENITIES

This chapter analyses the main amenities of the households in Musoma DC. The first section presents the main materials used to construct the dwelling, and the type of housing unit the household lives in. Section two reports the main source of drinking water and main type of toilet. In section three, the fuel used by the household is analysed, both for cooking and lighting. Section four reports the distance of the households to facilities as source of drinking water, schools, and food markets. In section five the anti-malaria measures taken by households are analysed.

7.1 Materials and Type of Housing Unit

Table 7.1 shows the distribution of households according to the main material used in the roof of the house. Overall, 55 percent of households have thatch as their main roof material and 45 percent have iron sheets.

The breakdown by cluster location shows that households in remote villages are more likely to use thatch than households in accessible villages, as 71 percent of

households in remote villages have thatch compared to 43 percent of households in accessible villages. On the other hand, households in accessible villages tend to use iron sheets more often.

The breakdown by poverty status shows that poor households are more likely to stay in thatched houses, at 77 percent compared to non-poor households at 42 percent. On the other hand, non-poor households tend to use iron sheets more often than poor households.

The breakdown by household size shows that 50 percent of households with 3-4 members uses thatch compared to 57 percent of households with seven or more members. The split-up by socio-economic group shows that the self-employed in agriculture is the category with highest share of households using thatch for the roof (63 percent), and that employees are the group with the lowest use of thatch (24 percent). According to use of iron sheets, employees have the highest share (76 percent) while 'self-employed agriculture' has the lowest share (37 percent).

The breakdown by gender of the household head shows that female-headed

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	54.7	0.0	45.3	0.0	0.0	0.0	0.0	100.0
Cluster Location									
Accessible	0.0	42.5	0.0	57.5	0.0	0.0	0.0	0.0	100.0
Remote	0.0	70.6	0.0	29.4	0.0	0.0	0.0	0.0	100.0
Poverty Status									
Poor	0.0	76.8	0.0	23.2	0.0	0.0	0.0	0.0	100.0
Non-poor	0.0	42.4	0.0	57.6	0.0	0.0	0.0	0.0	100.0
Household size									
1-2	0.0	57.7	0.0	42.3	0.0	0.0	0.0	0.0	100.0
3-4	0.0	49.9	0.0	50.1	0.0	0.0	0.0	0.0	100.0
5-6	0.0	54.7	0.0	45.3	0.0	0.0	0.0	0.0	100.0
7+	0.0	57.1	0.0	42.9	0.0	0.0	0.0	0.0	100.0
Socio-economic Group									
Employee	0.0	23.6	0.0	76.4	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	0.0	63.1	0.0	36.9	0.0	0.0	0.0	0.0	100.0
Self-employed - other	0.0	32.6	0.0	67.4	0.0	0.0	0.0	0.0	100.0
Other	0.0	53.8	0.0	46.2	0.0	0.0	0.0	0.0	100.0
Gender of the head of household									
Male	0.0	55.2	0.0	44.8	0.0	0.0	0.0	0.0	100.0
Female	0.0	52.8	0.0	47.2	0.0	0.0	0.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

7 Household Amenities

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	79.5	0.0	17.2	3.2	0.2	0.0	0.0	100.0
Cluster Location								
Accessible	71.9	0.0	23.7	4.4	0.0	0.0	0.0	100.0
Remote	89.4	0.0	8.6	1.6	0.5	0.0	0.0	100.0
Poverty Status								
Poor	88.5	0.0	9.7	1.8	0.0	0.0	0.0	100.0
Non-poor	74.4	0.0	21.3	4.0	0.3	0.0	0.0	100.0
Household size								
1-2	77.2	0.0	16.4	4.6	1.8	0.0	0.0	100.0
3-4	79.2	0.0	19.1	1.7	0.0	0.0	0.0	100.0
5-6	81.7	0.0	13.9	4.4	0.0	0.0	0.0	100.0
7+	78.8	0.0	18.3	2.9	0.0	0.0	0.0	100.0
Socio-economic Group								
Employee	57.2	0.0	33.2	9.6	0.0	0.0	0.0	100.0
Self-employed - agriculture	83.0	0.0	14.5	2.3	0.3	0.0	0.0	100.0
Self-employed - other	71.5	0.0	22.7	5.8	0.0	0.0	0.0	100.0
Other	82.9	0.0	17.1	0.0	0.0	0.0	0.0	100.0
Gender of the head of household								
Male	78.4	0.0	17.6	3.8	0.2	0.0	0.0	100.0
Female	83.4	0.0	15.7	1.0	0.0	0.0	0.0	100.0

Source :CWIQ 2006 Musoma 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	86.0	0.0	0.0	13.7	0.0	0.3	100.0
Cluster Location							
Accessible	78.2	0.0	0.0	21.3	0.0	0.5	100.0
Remote	96.2	0.0	0.0	3.8	0.0	0.0	100.0
Poverty Status							
Poor	95.2	0.0	0.0	4.8	0.0	0.0	100.0
Non-poor	80.9	0.0	0.0	18.7	0.0	0.4	100.0
Household size							
1-2	78.9	0.0	0.0	21.1	0.0	0.0	100.0
3-4	80.9	0.0	0.0	19.1	0.0	0.0	100.0
5-6	87.7	0.0	0.0	11.3	0.0	1.0	100.0
7+	90.6	0.0	0.0	9.4	0.0	0.0	100.0
Socio-economic Group							
Employee	58.1	0.0	0.0	41.9	0.0	0.0	100.0
Self-employed - agriculture	91.0	0.0	0.0	9.0	0.0	0.0	100.0
Self-employed - other	70.9	0.0	0.0	27.7	0.0	1.4	100.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Gender of the head of household							
Male	85.9	0.0	0.0	13.8	0.0	0.3	100.0
Female	86.4	0.0	0.0	13.6	0.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

households use iron sheets more often than male-headed households.

occupy the second place, with a share of 17 percent.

Table 7.2 shows the distribution of households by type of material used in the walls. Overall, 80 percent of houses are built with mud or mud bricks. Burnt bricks

The analysis of cluster location reveals that households in remote villages have a higher share of mud and mud bricks than households in accessible villages. The

rates are 89 and 72 percent respectively. On the other hand, while 24 percent of households in accessible villages use burnt bricks, the share for households in remote villages is 9 percent.

The analysis by poverty status reveals that poor households use mud or mud bricks more often than non-poor households at 89 and 74 percent respectively. In turn, 21 percent of non-poor households use burnt bricks as main material in the walls of the house, compared to 10 percent of poor households.

'Self-employed in agriculture' and 'other' are the categories with highest shares living in houses made of mud or mud bricks (83 percent), whereas employees have the highest share living in houses made of burnt bricks (33 percent).

The gender breakdown shows that households headed by females use mud or mud bricks more often than male-headed households, at rates of 83 and 78 percent of respectively.

The distribution of households by type of material used in the floor is shown in Table 7.3. Overall, the floor in 86 percent of households is made of mud or dirt, 14 percent of concrete.

The breakdown by cluster location shows that households in accessible villages, with a rate of 21 percent, have a higher share of houses with concrete floor than households in remote villages, with a rate of 4 percent. In turn, households in remote villages have a higher share of houses with mud or dirt floor (96 percent, against 78 percent households in accessible villages). 95 percent of poor households have mud or dirt compared to 81 percent of non-poor households. In turn, non-poor households have a higher share of houses with concrete or cement floor than poor households at 19 and 5 percent respectively.

The split-up by socio-economic group of the household shows that employees have the lowest share of mud or dirt and the highest share of concrete. All households belonging to the 'other' category have houses with mud or dirt floor.

The breakdown by household size shows that households with 7 or more members have the largest share of mud or dirt (91 percent) compared to small households

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

	Single room	Flat	Two or more rooms	Whole building	Other	Total
Total	3.2	0.0	4.4	89.1	3.4	100.0
Cluster Location						
Accessible	5.5	0.0	6.8	86.8	0.9	100.0
Remote	0.0	0.0	1.1	92.2	6.7	100.0
Poverty Status						
Poor	1.5	0.0	0.9	91.9	5.8	100.0
Non-poor	4.1	0.0	6.3	87.6	2.0	100.0
Household size						
1-2	7.0	0.0	10.9	82.1	0.0	100.0
3-4	5.9	0.0	8.3	85.8	0.0	100.0
5-6	2.2	0.0	2.0	94.3	1.5	100.0
7+	0.6	0.0	1.2	90.1	8.1	100.0
Socio-economic Group						
Employee	10.5	0.0	10.5	71.8	7.1	100.0
Self-employed - agric	1.8	0.0	3.5	91.3	3.3	100.0
Self-employed - other	7.1	0.0	7.1	82.3	3.5	100.0
Other	0.0	0.0	0.0	100.0	0.0	100.0
Gender of the head of household						
Male	2.7	0.0	4.2	88.8	4.3	100.0
Female	4.7	0.0	4.9	90.4	0.0	100.0

Source :CWIQ 2006 Musoma DC

with up to 2 members (79 percent). In turn, 21 percent of households with up to 2 members have concrete or cement flooring, against 9 percent of households with 7 or more members.

Finally, there are no differences between households headed by males and females.

Table 7.4 shows the percent distribution of households by type of housing unit they occupy. Overall, 89 percent of households occupy the whole building where they live.

Households in accessible clusters are slightly less likely to occupy the whole building than households in remote clusters, at 87 and 92 percent respectively. On the other hand, non-poor households are more likely to occupy the whole building than poor households at 92 and 88 percent respectively. The breakdown by household size shows that 7 percent of small households, those with up to 2 members, lives in a single room; while over 90 percent of the households with 5 or more members occupy the whole building.

The analysis of socio-economic groups shows that the 'other' category has the highest share of households occupying the whole building, at 100 percent, while 72

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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	Unprotec ted well	Rain water	River, lake or pond	Vendor, truck	Other	Total	Safe source
Total	0.3	3.0	16.6	4.2	27.0	0.0	48.3	0.6	0.0	100.0	21.1
Cluster Location											
Accessible	0.5	5.3	16.4	6.3	24.4	0.0	46.1	1.0	0.0	100.0	23.2
Remote	0.0	0.0	16.8	1.5	30.4	0.1	51.3	0.0	0.0	100.0	18.3
Poverty Status											
Poor	0.0	0.8	17.1	2.9	20.5	0.0	57.9	0.8	0.0	100.0	20.0
Non-poor	0.4	4.2	16.3	4.9	30.5	0.1	43.1	0.4	0.0	100.0	21.7
Household size											
1-2	0.0	9.7	10.5	3.5	25.7	0.0	50.6	0.0	0.0	100.0	14.0
3-4	0.0	3.1	14.1	4.6	37.1	0.0	41.0	0.0	0.0	100.0	18.8
5-6	0.0	3.1	15.3	3.8	31.5	0.0	46.3	0.0	0.0	100.0	19.1
7+	0.7	0.7	21.1	4.5	16.9	0.1	54.3	1.6	0.0	100.0	26.4
Socio-economic Group											
Employee	5.3	10.5	11.7	4.3	9.8	0.0	58.4	0.0	0.0	100.0	21.3
Self-employed - agric	0.0	0.8	20.3	5.2	31.8	0.0	41.4	0.4	0.0	100.0	25.5
Self-employed - other	0.0	9.9	2.9	1.1	14.4	0.0	70.2	1.5	0.0	100.0	4.0
Other	0.0	0.0	21.6	2.3	25.9	0.0	50.2	0.0	0.0	100.0	23.9
Gender of the head of household											
Male	0.0	3.1	16.6	3.8	25.2	0.0	50.5	0.7	0.0	100.0	20.3
Female	1.2	2.4	16.7	5.7	33.2	0.0	40.7	0.0	0.0	100.0	23.7

Source :CWIQ 2006 Musoma DC

percent of the 'employee' category occupies the whole building. 11 percent of them occupy two or more rooms or one room.

There are no important differences by gender of the household head.

7.2 Main Source of Drinking Water and Main Toilet

The percentage distribution of households by source of drinking water is shown in Table 7.5. Overall, 21 percent of households have a safe source of water, whereas 48 percent of all households get drinking water from river, lake or pond. 27 percent of them gets it from an unprotected well. Safe sources of drinking water are treated pipes, bore holes, hand pumps, and protected wells.

The analysis of cluster location shows that 23 percent of households in accessible villages have a safe source of drinking water, whereas the share for households in remote villages is 18 percent. The shares of households with unprotected wells are 24 percent for accessible villages and 30 percent for households in remote villages. Similarly, 21 percent of poor households obtains drinking water from unprotected

wells, against 31 percent of non-poor households. On the other hand, 51 percent of households in remote villages get drinking water from river, lake or pond compared to 46 percent of households in accessible villages. Similarly, 58 percent of poor households gets drinking water from river, lake or pond compared to 43 percent of non-poor households.

When analysing by household size, it is noticed that 26 percent of households with 7 or more members has a safe source of drinking water compared to 14 percent of households with up to 2 members. The shares of households with unprotected wells are 26 percent for smaller households with up to 2 members and 17 percent for households with 7 or more members. It is also observed that 54 of households with 7 or more member's gets drinking water from river, lake or pond compared to 41 percent of household with 3 to 4 members.

The split-up by gender of the household head shows a slight difference in access to safe water. 33 percent of female-headed households get drinking water from unprotected wells, against 25 percent of male-headed households. On the other hand, 51 percent of male-headed

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	Uncover d pit latrine	Ventilated pit latrine	Other	Total	Safe sanitation
Total	19.5	0.0	0.8	0.0	53.5	25.1	1.0	0.0	100.0	54.4
Cluster Location										
Accessible	13.3	0.0	1.5	0.0	52.8	30.7	1.8	0.0	100.0	54.2
Remote	27.6	0.0	0.0	0.0	54.5	17.8	0.0	0.0	100.0	54.5
Poverty Status										
Poor	23.1	0.0	0.8	0.0	49.5	25.7	0.9	0.0	100.0	50.3
Non-poor	17.5	0.0	0.8	0.0	55.8	24.8	1.1	0.0	100.0	56.6
Household size										
1-2	32.1	0.0	2.4	0.0	45.3	17.8	2.4	0.0	100.0	47.7
3-4	17.6	0.0	1.0	0.0	48.0	31.6	1.8	0.0	100.0	49.0
5-6	20.3	0.0	0.0	0.0	55.3	24.4	0.0	0.0	100.0	55.3
7+	16.3	0.0	0.8	0.0	58.8	23.3	0.8	0.0	100.0	59.6
Socio-economic Group										
Employee	2.6	0.0	5.3	0.0	73.5	13.4	5.3	0.0	100.0	78.8
Self-employed - agriculture	22.9	0.0	0.0	0.0	50.9	25.5	0.7	0.0	100.0	50.9
Self-employed - other	11.5	0.0	2.9	0.0	64.5	19.5	1.6	0.0	100.0	67.4
Other	18.9	0.0	0.0	0.0	32.6	48.5	0.0	0.0	100.0	32.6
Gender of the head of household										
Male	18.0	0.0	0.7	0.0	55.6	24.7	1.0	0.0	100.0	56.3
Female	24.5	0.0	1.2	0.0	46.3	26.8	1.2	0.0	100.0	47.5

Source :CWIQ 2006 Musoma DC

households get drinking water from river, lake or pond compared to 41 percent of female-headed households.

The breakdown by socio-economic group of the household shows that 'self-employed agriculture' are the category with the highest rate of access to safe sources of drinking water, followed by the 'other' category (about 25 percent), while 'self employed other' is the category with the lowest access to safe water (4 percent). On the other hand, 70 percent of the households where the main income earner is self-employed in non-agricultural activities get drinking water from river, lake or pond compared to 41 percent of households where the main income earner is self-employed in agricultural activities.

Table 7.6 shows the percentage distribution of households by main type of toilet. 54 percent of households have safe sanitation, whereas 25 percent use an uncovered pit latrine.

The cluster breakdown shows that 28 percent of households in remote villages uses the bush while the share of households in accessible villages is 13 percent. Non-poor households are more likely to have safe sanitation than poor households, with rates of 57 and 50 percent respectively.

Households with up to 2 members have the lowest percentage of safe sanitation, at 48 percent, while households with 7 or more members have the highest percentage of safe sanitation at 60 percent. Uncovered pit latrines are most used by households with 3 to 4 members. It stands out that up to 32 percent of households with up to 2 members have no toilet.

The breakdown by socio-economic status shows that employees have the highest rate of safe sanitation, at 79 percent while the 'other' category have the lowest rate of safe sanitation at 33 percent.

The analysis by gender of the household head reveals that male-headed households are more likely to have safe sanitation than female-headed households. Furthermore, female-headed households are more likely to have no toilet than male-headed households, with rates of 25 and 18 percent, respectively.

7.3 Type of Fuel

Table 7.7 shows the distribution of households by fuel used for cooking. Overall, 96 percent of households use firewood. Virtually all households in remote villages use firewood, compared to 93 percent of households in accessible

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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	95.8	3.7	0.5	0.0	0.0	0.0	0.0	0.0	100.0	0.5
Cluster Location										
Accessible	92.6	6.5	0.9	0.0	0.0	0.0	0.0	0.0	100.0	0.9
Remote	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Poverty Status										
Poor	98.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Non-poor	94.4	4.8	0.8	0.0	0.0	0.0	0.0	0.0	100.0	0.8
Household size										
1-2	81.6	13.9	4.4	0.0	0.0	0.0	0.0	0.0	100.0	4.4
3-4	95.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
5-6	99.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7+	98.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Socio-economic Group										
Employee	84.2	10.5	5.3	0.0	0.0	0.0	0.0	0.0	100.0	5.3
Self-employed - agriculture	99.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Self-employed - other	85.4	13.4	1.2	0.0	0.0	0.0	0.0	0.0	100.0	1.2
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	96.4	3.0	0.6	0.0	0.0	0.0	0.0	0.0	100.0	0.6
Female	93.8	6.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0

Source :CWIQ 2006 Musoma 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	98.5	0.0	1.0	0.0	0.0	0.0	0.3	0.3	100.0
Cluster Location									
Accessible	97.3	0.0	1.8	0.0	0.0	0.0	0.4	0.5	100.0
Remote	99.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	100.0
Poverty Status									
Poor	99.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8	100.0
Non-poor	98.1	0.0	1.6	0.0	0.0	0.0	0.3	0.0	100.0
Household size									
1-2	91.2	0.0	8.8	0.0	0.0	0.0	0.0	0.0	100.0
3-4	99.2	0.0	0.0	0.0	0.0	0.0	0.8	0.0	100.0
5-6	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7+	99.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8	100.0
Socio-economic Group									
Employee	89.5	0.0	10.5	0.0	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	99.6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	100.0
Self-employed - other	96.1	0.0	2.4	0.0	0.0	0.0	0.0	1.5	100.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Gender of the head of household									
Male	99.2	0.0	0.3	0.0	0.0	0.0	0.0	0.4	100.0
Female	95.7	0.0	3.3	0.0	0.0	0.0	1.0	0.0	100.0

Source :CWIQ 2006 Musoma DC

villages. 7 percent of households in accessible villages use charcoal. The breakdown by poverty status shows that poor households tend to use firewood more often than non-poor households.

The breakdown by household size shows that the smallest households (with up to 2 members) tend to use charcoal more often than the rest, at 14 percent, followed by households with 3 or 4 members at 5 percent. The remaining categories report

95 percent of households or more using firewood as the main fuel for cooking. There are no important differences by gender of the household head. However, the split-up by socio-economic group of the household shows that 13 percent of the self-employed in non agricultural activities and 11 percent of the employees use charcoal for cooking, whereas the other two categories use firewood in almost every case.

Table 7.8 shows the distribution of households according to the fuel used for lighting. Overall, 99 percent of the households in the district uses kerosene or paraffin, 1 percent uses electricity. Firewood, gas, solar panels, batteries, candles, and other types of fuel are virtually not used for lighting in the district.

The analysis of cluster location shows that all households using electricity are located in accessible villages, but still represent only 2 percent of households in accessible villages in the district. Virtually no household in remote villages uses electricity. The breakdown by poverty status reveals no significant differences between poor and non-poor households in the use of kerosene/paraffin.

The breakdown by household size shows

that in almost all households with 5 or more members, paraffin is more likely to be used as source of lighting, while households with up to 2 members use electricity, with a share of 9 percent.

The analysis by socio-economic group of the household shows that all households belonging to the 'self-employed agriculture' and 'other' categories use kerosene/paraffin. On the other hand, employees have the highest rate of use of electricity, at 11 percent followed by the 'self-employed other' at 2 percent. The remaining categories show virtually null shares of use of electricity.

Finally, male-headed households are more likely to use paraffin/kerosene than female-headed households, while the female-headed households are more likely to use electricity than male-headed households.

7.4 Distances to Facilities

Table 7.9 shows the percent distribution of households by time to reach the nearest drinking water supply and health facility. Although each table gives more detailed information, the analysis of this section will be focused on the 30 minute threshold that was used to define access to a facility. It must be kept in mind that distance to

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

	Drinking water supply				Total	Health facility				Total
	<= 15	16-30	31-60	61+		<= 15	16-30	31-60	61+	
Total	44.6	28.1	17.9	9.5	100.0	24.8	13.7	24.2	37.2	100.0
Cluster Location										
Accessible	48.4	28.5	16.8	6.3	100.0	38.1	18.0	22.1	21.7	100.0
Remote	39.7	27.4	19.3	13.6	100.0	7.3	8.1	27.0	57.7	100.0
Poverty Status										
Poor	37.6	26.9	24.3	11.1	100.0	15.5	12.2	32.5	39.8	100.0
Non-poor	48.5	28.7	14.3	8.6	100.0	30.0	14.6	19.6	35.8	100.0
Household size										
1-2	53.2	26.0	7.9	12.8	100.0	25.5	20.9	19.3	34.4	100.0
3-4	46.8	30.8	16.1	6.3	100.0	28.6	14.1	22.5	34.8	100.0
5-6	42.7	27.2	19.9	10.2	100.0	23.3	10.4	23.0	43.3	100.0
7+	41.8	27.3	20.7	10.2	100.0	23.0	13.6	27.8	35.6	100.0
Socio-economic Group										
Employee	65.4	18.9	6.8	8.9	100.0	60.4	7.8	17.7	14.0	100.0
Self-employed - agriculture	40.1	28.3	20.1	11.6	100.0	22.4	12.4	24.1	41.1	100.0
Self-employed - other	55.3	30.1	12.3	2.2	100.0	23.6	18.1	27.9	30.3	100.0
Other	45.4	26.7	18.9	8.9	100.0	26.5	19.9	19.4	34.2	100.0
Gender of the head of household										
Male	43.3	27.4	19.0	10.3	100.0	23.6	12.6	23.2	40.6	100.0
Female	49.3	30.4	13.9	6.5	100.0	29.0	17.8	27.8	25.5	100.0

Source :CWIQ 2006 Musoma DC

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public transportation is one of the variables used to define a cluster as accessible or remote, so it must come as no surprise that distance to public transportation and cluster location are strongly correlated. However, the rest of the variables, despite not being used to define cluster location, also show strong correlations.

Overall, 73 percent of households are located under 30 minutes of a drinking water supply. In addition, 39 percent of the households are located under 30 minutes of a health facility.

The breakdown by cluster location shows that 77 percent of households in accessible villages have access to a drinking water source and 56 percent to a health facility, whereas the shares for households in remote villages are 67 and 15 percent.

The analysis by poverty status reveals that non-poor households have a higher access rate to drinking water supply and health facilities at 78 and 45 percent respectively than poor households at 65 and 28 percent respectively.

The breakdown by household size shows that the smallest households (up to 2 members) have the highest rates of access to sources of drinking water and to health facilities.

Households where the main income earner is an employee or self-employed in non-agricultural activities have higher rates of access to drinking water. Employees also have the highest rate of access to health facilities, whereas households in the 'self-employed agriculture' category have the lowest.

The breakdown by gender of the household head shows that female-headed households have a higher access rate to drinking water supply and health facilities at 80 and 47 percent respectively than male-headed households at 70 and 37 percent respectively.

Table 7.10 shows the percent distribution of households by time to reach the nearest primary and secondary school. Overall, 72 percent of households are located within 30 minutes of a primary school, but just 32 percent of households live within 30 minutes of a secondary school. Moreover, 47 percent of households are located 60 minutes or more away from the nearest secondary school. Access to school was also analysed in chapter 3 but with a different focus. In chapter 3, access to school was analysed at child level, i.e. the access rate of each child. In this section the focus is the distance of the house to the nearest school.

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

	Primary school				Total	Secondary school				Total
	<= 15	16-30	31-60	61+		<= 15	16-30	31-60	61+	
Total	50.4	22.3	15.1	12.1	100.0	13.7	18.1	21.5	46.7	100.0
Cluster Location										
Accessible	61.7	20.4	11.0	6.9	100.0	12.7	20.4	20.6	46.3	100.0
Remote	35.6	24.9	20.5	18.9	100.0	15.0	15.1	22.6	47.2	100.0
Poverty Status										
Poor	45.4	26.9	15.8	12.0	100.0	13.1	13.1	22.4	51.4	100.0
Non-poor	53.2	19.8	14.8	12.2	100.0	14.1	20.9	21.0	44.1	100.0
Household size										
1-2	44.8	16.7	18.3	20.2	100.0	13.9	14.5	19.6	52.0	100.0
3-4	56.6	19.3	13.7	10.3	100.0	13.9	17.6	21.8	46.7	100.0
5-6	49.0	26.0	12.4	12.5	100.0	11.0	21.6	21.1	46.3	100.0
7+	48.7	23.6	17.1	10.5	100.0	15.4	17.2	22.2	45.2	100.0
Socio-economic Group										
Employee	71.5	21.3	7.3	0.0	100.0	33.9	32.5	10.8	22.9	100.0
Self-employed - agric	47.7	20.4	17.9	14.0	100.0	11.0	18.0	22.1	48.9	100.0
Self-employed - other	58.0	26.9	7.7	7.4	100.0	20.0	14.2	22.6	43.3	100.0
Other	39.8	30.6	13.8	15.8	100.0	7.6	20.1	20.3	52.0	100.0
Gender of the head of household										
Male	49.8	23.6	14.1	12.6	100.0	15.0	19.0	21.5	44.4	100.0
Female	52.6	18.0	18.8	10.5	100.0	9.0	14.9	21.6	54.5	100.0

Source :CWIQ 2006 Musoma DC

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

	Food market				Total	Public transportation				Total
	<= 15	16-30	31-60	61+		<= 15	16-30	31-60	61+	
Total	39.9	15.2	19.5	25.4	100.0	57.0	8.6	13.3	21.1	100.0
Cluster Location										
Accessible	59.9	19.7	15.4	5.0	100.0	82.6	9.7	5.4	2.3	100.0
Remote	13.5	9.4	24.9	52.2	100.0	23.4	7.2	23.7	45.7	100.0
Poverty Status										
Poor	34.0	16.7	17.1	32.2	100.0	46.2	13.7	14.4	25.8	100.0
Non-poor	43.1	14.5	20.8	21.6	100.0	63.0	5.8	12.8	18.4	100.0
Household size										
1-2	55.7	7.0	21.3	16.0	100.0	56.7	6.5	15.9	20.8	100.0
3-4	41.2	17.5	22.0	19.3	100.0	64.5	6.3	12.9	16.3	100.0
5-6	37.9	12.3	18.6	31.2	100.0	55.6	4.6	13.2	26.7	100.0
7+	35.4	18.3	17.8	28.5	100.0	52.8	13.8	13.0	20.5	100.0
Socio-economic Group										
Employee	60.0	14.3	11.8	13.9	100.0	83.9	5.3	4.0	6.8	100.0
Self-employed - agriculture	33.2	14.0	23.9	29.0	100.0	50.7	7.3	16.7	25.3	100.0
Self-employed - other	57.4	17.5	9.9	15.2	100.0	72.6	14.1	5.7	7.7	100.0
Other	44.0	23.3	6.7	26.0	100.0	58.2	8.5	6.7	26.6	100.0
Gender of head of household										
Male	36.8	16.2	18.0	29.0	100.0	55.1	8.5	13.4	23.0	100.0
Female	50.7	12.0	24.8	12.5	100.0	63.6	9.1	13.2	14.1	100.0

Source :CWIQ 2006 Musoma DC

The analysis of cluster location shows that 82 percent of households in accessible villages have access to primary school, against 61 of remote households in remote villages. For secondary school, the rates go down to 33 and 30 percent, respectively. The access to primary school by poor and non-poor households does not differ strongly. However, the access to secondary education is lower for poor households, at 26 percent against 35 percent of non-poor households.

The analysis of household size shows that households with 7 or more members have higher rates of access to both primary and secondary school than households with up to 2 members.

The breakdown by socio-economic group shows that employees have the highest rate of access to primary and secondary schools, 93 and 67 percent, respectively. Households in the category 'self-employed agriculture' have the lowest access rates to primary schools at 67 percent.

Households headed by males have higher access rates to primary schools than female-headed households, at 74 percent, against 71 percent of females. Similarly, male-headed households have higher

access rates to secondary school than female-headed households at 34 and 24 percent respectively.

Table 7.11 shows the percent distribution of households by time to reach the nearest food market and public transportation. Overall, 55 percent of households have access to a food market, and 66 percent to public transportation.

The analysis of cluster location shows that 80 percent of households in accessible villages live within 30 minutes of a food market and, against 23 of households in remote villages. The shares for public transportation are 93 for accessible and 30 percent for households in remote villages.

The analysis by poverty status reveals that non-poor households have a higher access to the food market and public transportation at 58 and 69 percent respectively than poor households at 51 and 60 percent respectively.

The breakdown by size of the household shows that 63 percent of households with 1 or 2 members lives within 30 minutes of a food market compared to 53 percent of households with 7 or more members. In contrast, households with 1 or 2 members have a lower rate of access to public

7 Household Amenities

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

	Share taking measures	Use bed net	Insecticide	Anti-malaria drug	Fumigation	Insecticide treated net	Maintain good drainage	Maintain good sanitation	Herbs	Burn leaves	Window/door net
Total	77.3	41.2	2.7	15.5	0.0	43.4	0.6	26.2	0.9	0.8	0.7
Cluster Location											
Accessible	77.9	37.6	4.3	21.3	0.0	50.8	0.6	24.8	0.5	0.3	1.3
Remote	76.4	45.9	0.6	7.8	0.1	33.5	0.6	28.2	1.3	1.5	0.0
Poverty Status											
Poor	78.3	46.8	0.7	9.6	0.0	33.5	0.0	32.9	1.1	1.8	1.0
Non-poor	76.7	38.0	3.8	18.8	0.1	48.9	1.0	22.4	0.7	0.3	0.6
Household size											
1-2	65.9	39.0	3.1	7.1	0.0	56.5	0.0	18.0	2.5	0.0	0.0
3-4	73.2	41.0	3.8	20.6	0.0	41.4	0.0	27.8	0.9	0.7	1.5
5-6	79.1	43.4	5.5	19.4	0.2	41.4	0.0	17.4	0.0	1.5	0.0
7+	82.4	40.3	0.0	11.7	0.0	42.8	1.6	33.3	1.0	0.6	1.0
Socio-economic Group											
Employee	100.0	35.4	9.1	11.8	0.0	64.6	5.3	14.3	0.0	0.0	0.0
Self-employed - agric	72.2	41.8	1.8	14.5	0.1	40.4	0.4	28.4	1.3	1.2	0.6
Self-employed - other	93.5	42.7	1.3	11.6	0.0	46.9	0.0	22.8	0.0	0.0	1.6
Other	64.4	33.2	11.8	51.1	0.0	38.5	0.0	29.6	0.0	0.0	0.0
Gender of the head of household											
Male	82.7	41.7	3.2	16.0	0.1	44.3	0.0	24.6	0.7	1.0	0.4
Female	58.3	38.4	0.0	13.1	0.0	38.9	3.7	34.2	1.8	0.0	2.2

Source :CWIQ 2006 Musoma DC

transportation than households with 7 or more members.

Employees and self-employed in non-agricultural activities have the highest rates of access to food markets and public transportation, followed by the 'other' category with both rates at 67 percent. The self-employed in agriculture have the lowest rates, at 47 and 58 percent, respectively.

Female-headed households have a higher access rate to food markets (63 percent) compared to 53 percent of male-headed households. Access to public transportation shows that female-headed households have an access rate of 73 percent and male-headed households have a rate of 64 percent.

7.5 Anti-Malaria Measures

The percentage of households taking anti-malaria measures and the specific measures they take are shown in Table 7.12. Overall, 77 percent of the households take measures against malaria. The most commonly taken are use of insecticide treated nets (43 percent), bed nets (41 percent) and maintaining good sanitation (26 percent).

The analysis of cluster location shows that 8 percent of households in remote villages use anti-malaria drugs compared to 21 percent of households in accessible villages. Use of bed nets is reported more frequently by households in remote villages (46 percent) than in accessible villages (38 percent). On the other hand, while 51 percent of households in accessible village's uses insecticide treated nets, the share for households in remote villages is 34 percent. Similarly, non-poor households use insecticide treated nets more often than poor households, at 49 and 34 percent respectively. On the other hand, poor households use bed nets more often than non-poor households, at 47 and 38 percent respectively. The rates for maintenance of good sanitation are lower, though poor households tend to maintain good sanitation than non-poor households at 33 and 22 percent respectively.

The share of households taking measures increases with the size of the household. The analysis of socio-economic status shows that all households in the category 'employee' take measures, 94 percent of 'self-employed other', 72 percent of 'self-employed agriculture', and 64 percent of 'other'. Finally, households headed by males are more likely to take measures

against malaria than households headed by females. Male-headed households use bed-nets, insecticide treated nets, and anti-malaria drugs more frequently than female-headed households. In turn, a higher share of the latter maintains good sanitation to prevent malaria.

7 Household Amenities

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 responses show that around 90 percent of the households had at least one member attending a kitongoji or village meeting in the past 12 months. About a quarter (26 percent) of the households reported attending meetings at the ward level while only 2 percent of the households reported having at least one member attend a district level meeting.

There are no differences by cluster location or poverty status. Data disaggregation by socio-economic group shows no wide difference in attendance to kitongoji meetings. At village meetings the highest attendance rates are reported by the self-employed in agriculture and in other activities, whereas at ward and district level the highest rates are reported by the employees. Overall, attendance rates to meetings tend to decrease as the governance level increases. In particular, kitongoji and village-level meetings have the highest attendance rates, followed by ward-level meetings. District-level meetings have the lowest attendance rates.

8.2 Satisfaction with Leaders

The main respondent was asked whether he or she considered the leaders at kitongoji, village, ward and district levels

**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	91.6	89.1	25.7	2.3
Cluster Location				
Accessible	91.4	89.1	27.0	2.7
Remote	91.8	89.2	24.1	1.8
Poverty Status				
Poor	92.9	88.7	26.6	2.8
Non-poor	90.9	89.4	25.2	2.1
Socio-economic Group				
Employee	90.9	83.6	53.8	9.1
Self-employed - agriculture	92.1	90.5	25.0	1.7
Self-employed - other	90.0	87.8	29.1	3.6
Other	91.4	82.7	0.0	0.0
No. of Obs.	450	450	450	450

Source: CWIQ 2006 Musoma DC

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 are displayed in Table 8.2. There is an inverse trend between level of government and satisfaction: lower levels show higher satisfaction rates, from 87 percent for kitongoji leaders, to 44 percent to district leaders, while 82 percent report satisfaction with their district councillor. It is worth noticing that there are virtually no households which responded ‘Don’t know’ at kitongoji and village levels.

The breakdown by cluster location shows no strong differences, except for the satisfaction with the district councillor, which is higher in accessible villages. In addition, poor households tend to show similar or higher satisfaction rates than non-poor households. Analysis of the data by socio-economic category shows that the employees report the highest satisfaction rates with leaders at all levels of government, while the self-employed in agriculture tend to report the lowest rates of satisfaction.

**Table 8.2: Distribution of leaders' satisfaction ratings and reasons for dissatisfaction
(any household member within past 12 months)**

	Kitongoji Leaders	Village Leaders	Ward Leaders	District Leaders	District Councillor
Total					
Satisfied	87.3	78.5	68.6	44.1	81.9
Not Satisfied	12.4	20.4	19.9	14.4	12.4
Don't Know	0.2	1.1	11.4	41.4	5.8
Share Satisfied by Cluster Location					
Accessible	87.6	79.7	68.0	42.8	83.9
Remote	87.0	76.9	69.5	45.9	79.2
Share Satisfied by Poverty Status					
Poor	89.7	79.4	73.8	46.0	83.4
Non-poor	86.1	78.0	65.8	43.1	81.0
Share Satisfied by Socio-economic Group					
Employee	100.0	93.0	97.3	50.1	97.1
Self-employed - agriculture	85.6	76.8	63.9	42.3	81.5
Self-employed - other	89.9	79.7	78.1	49.3	79.2
Other	88.2	82.2	69.0	44.0	82.0
Reasons for Dissatisfaction (incl. don't know)					
Political differences	0.0	1.1	0.8	0.4	1.0
Embezzlement/corruption	50.5	51.5	25.4	1.7	21.0
They do not listen to people	30.5	31.0	13.8	1.0	14.8
Favouritism	39.0	39.9	15.4	1.4	8.7
Lazy/inexperienced	1.1	3.1	0.0	0.0	1.1
Personal Reasons	6.9	6.3	3.0	2.9	1.2
I see no results	18.9	18.4	29.5	8.1	31.8
They never visit us	14.9	19.5	53.3	88.4	32.0
No. of Obs.	450	450	450	450	450

Source: CWIQ 2006 Musoma DC

1. While the question for kitongoji, village, ward and district leaders was framed as: "do you think the leaders at this level are polite and helpful", the question for the district councillor was framed as 'are you satisfied with the work of your district councillor?'

Finally, respondents who reported dissatisfaction or said they did not know at a certain level of government were asked why this was so. The last panel of table 8.2 summarizes this information. Reasons for dissatisfaction vary along different levels of government. The main reasons for dissatisfaction at kitongoji and village levels are corruption (51 percent), favouritism (39 percent), and not listening to people (31 percent). Results for village leaders are similar. For ward and district leaders, the most cited reason is 'they never visit us', at 53 and 88 percent for ward and district leaders, respectively. For district councillors, 'they never visit us' and 'I see no results' were the most cited, with 32 percent each.

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. Overall, the percentage of households receiving information on finances in the district is lower for ward and district (6 and 1 percent) than for kitongoji and village (26 and 28 percent). There are no remarkable differences by cluster location or poverty status.

The split-up by socio-economic group shows that the employees report the

highest shares receiving information at all levels of government. There are no wide differences between the remaining groups at kitongoji or district level, but the 'other' socio-economic group reports the lowest shares receiving information on village and wards finances.

Regarding the sources, the majority of households reported receiving financial information at each level through meetings. Virtually all the households who received information on district finances did so by letter. Rumours and hear-say were reported by 9 percent of households regarding kitongoji finances and 13 percent of households regarding village finances.

Finally, respondents were asked whether they were satisfied with the 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. The rate of satisfaction decreases while the level of government increases, and the share of 'don't know' increases'. The share of dissatisfied respondents is roughly one third, except for district spending, at 14 percent.

Higher shares of households from accessible villages report to be satisfied with public spending at all levels compared to households located in remote clusters. At the same time, non-poor households tend to report higher shares of satisfaction than poor households. The breakdown by socio-economic category shows that employees report the highest rates of satisfaction with public spending at all levels, while 'self-employed other' report the lowest rates.

Households that reported dissatisfaction or said they did not know were asked to give reasons as to why this was so. The most prominent reason was that the leaders do not provide information. The shares increase with level of government, ranging from 52 percent for kitongoji spending to 85 percent for district spending. Embezzlement or corruption reports the second highest rates, at 35, 44, 26, and 4 percent for kitongoji, village, ward, and district levels. 'I see no results' is the third most cited reason for dissatisfaction with public spending.

Table 8.3: Percentage distribution of households who received financial (any household member within past 12 months)

	Kitongoji Finances	Village Finances	Ward Finances	District Finances
Total	26.4	27.5	5.8	0.6
Cluster Location				
Accessible	26.3	25.7	5.6	1.1
Remote	26.5	29.8	6.0	0.0
Poverty Status				
Poor	25.6	25.7	6.0	0.0
Non-poor	26.8	28.5	5.7	0.9
Socio-economic Group				
Employee	42.3	34.6	22.4	9.1
Self-employed - agriculture	25.0	27.1	5.0	0.2
Self-employed - other	26.5	31.3	5.9	0.0
Other	28.7	14.9	0.5	0.0
Source				
Letter	0.0	0.0	0.0	100.0
Notice board	0.0	0.0	0.0	0.0
Meeting	84.8	85.8	94.8	77.0
Rumours/hear-say	9.3	12.8	0.6	0.0
Radio/newspapers	0.0	0.0	0.0	0.0
No. of Obs.	450	450	450	450

Source: CWIQ 2006 Musoma DC

Table 8.4: Satisfaction with public spending and reasons for dissatisfaction

(any household member within past 12 months)

	Kitongoji Spending	Village Spending	Ward Spending	District Spending
Total				
Satisfied	50.9	43.5	30.6	24.7
Not Satisfied	33.5	37.7	31.6	14.3
Don' Know	15.6	18.7	37.8	61.0
Share Satisfied by Cluster Location				
Accessible	52.7	45.1	33.2	28.1
Remote	48.6	41.5	27.1	20.4
Share Satisfied by Poverty Status				
Poor	49.9	40.1	27.0	16.3
Non-poor	51.5	45.4	32.5	29.4
Share Satisfied by Socio-economic Group				
Employee	70.5	57.2	50.8	33.8
Self-employed - agriculture	51.9	44.2	28.9	25.4
Self-employed - other	40.6	35.5	26.4	20.9
Other	56.3	50.3	45.4	22.1
Reasons for Dissatisfaction (incl. don't know)				
I see no results	23.1	16.8	9.3	5.4
Embezzlement/corruption	35.1	43.5	25.8	3.7
Favouritism	8.8	8.8	6.0	3.2
This is what I hear	8.1	11.0	8.4	0.2
They give no information	52.0	54.5	73.6	85.0
No. of Obs.	450	450	450	450

Source: CWIQ 2006 Musoma DC