

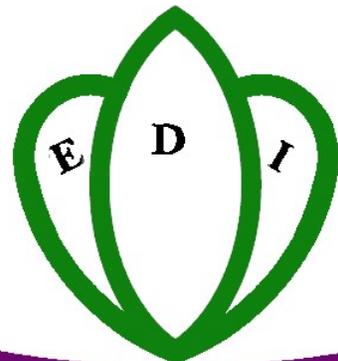
PMO-RALG

NGORONGORO DC CWIQ
Survey on Poverty, Welfare and
Services in Ngorongoro DC

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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)

	Margin of					
	Total	error*	Accessible	Remote	Poor	Non-poor
Household characteristics						
<i>Dependency ratio</i>	1.2	0.0	1.2	1.1	1.5	0.8
<i>Head is male</i>	87.0	1.9	84.4	89.2	87.9	86.2
<i>Head is female</i>	13.0	2.0	15.6	10.8	12.1	13.8
<i>Head is monogamous</i>	32.0	2.5	37.7	27.3	24.7	39.3
<i>Head is polygamous</i>	52.3	3.0	45.1	58.5	65.2	39.7
<i>Head is not married</i>	15.6	2.1	17.3	14.2	10.1	21.0
Household welfare						
Household economic situation compared to one year ago						
<i>Worse now</i>	61.1	3.8	53.0	68.0	66.8	55.6
<i>Better now</i>	23.7	4.1	31.7	17.0	20.3	27.1
Neighborhood crime/security situation compared to one year ago						
<i>Worse now</i>	16.0	3.7	15.4	16.5	19.9	12.1
<i>Better now</i>	41.1	4.6	43.9	38.7	43.8	38.5
Difficulty satisfying household needs						
<i>Food</i>	67.3	5.3	53.2	79.3	72.6	62.2
<i>School fees</i>	0.2	0.2	0.5	0.0	0.0	0.4
<i>House rent</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Utility bills</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Health care</i>	45.5	3.3	33.7	55.5	51.7	39.4
Agriculture						
Land owned compared to one year ago						
<i>Less now</i>	1.6	0.7	2.4	0.9	2.9	0.3
<i>More now</i>	3.4	1.2	6.5	0.7	3.0	3.8
Cattle owned compared to one year ago						
<i>Less now</i>	74.9	3.6	67.3	81.3	82.1	67.8
<i>More now</i>	7.8	1.5	12.0	4.3	7.8	7.8
Use of agricultural inputs						
<i>Yes</i>	27.5	2.2	34.0	22.1	27.4	27.7
<i>Fertilizers</i>	28.1	5.7	40.2	12.4	21.9	34.1
<i>Improved seedlings</i>	7.2	2.4	11.8	1.3	0.0	14.2
<i>Fingerlings</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Hooks and nets</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Insecticides</i>	71.0	5.9	57.9	88.0	78.1	64.1
<i>Other</i>	0.0	0.0	0.0	0.0	0.0	0.0
Household infrastructure						
<i>Secure housing tenure</i>	1.4	1.2	3.0	0.0	0.0	2.7
<i>Access to water</i>	38.7	6.7	57.8	22.5	35.2	42.1
<i>Safe water source</i>	11.9	4.2	18.0	6.7	8.6	15.2
<i>Safe sanitation</i>	2.0	1.8	4.3	0.0	0.0	3.9
<i>Improved waste disposal</i>	9.5	3.5	10.1	9.0	2.5	16.4
<i>Non-wood fuel used for cooking</i>	3.1	3.1	6.8	0.0	0.0	6.1
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>	7.3	2.9	10.7	4.4	0.2	14.2
<i>Radio set</i>	27.4	4.0	41.3	15.6	18.1	36.5
<i>Television set</i>	1.8	1.6	3.9	0.0	0.0	3.5

Employment						
Employer in the main job						
<i>Civil service</i>	0.2	0.1	0.2	0.1	0.1	0.3
<i>Other public serve</i>	0.8	0.4	1.1	0.5	0.9	0.7
<i>Parastatal</i>	0.1	0.1	0.0	0.1	0.1	0.0
<i>NGO</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Private sector formal</i>	2.2	1.7	4.7	0.0	0.5	4.5
<i>Private sector informal</i>	38.0	1.8	33.9	41.8	34.3	42.7
<i>Household</i>	53.1	1.3	54.6	51.8	57.3	47.8
Activity in the main job						
<i>Agriculture</i>	59.8	2.6	58.5	61.0	62.5	56.4
<i>Mining/quarrying</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Manufacturing</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>Services</i>	3.2	1.6	4.3	2.2	1.6	5.3
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>	0.0	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>Underemployed (age 15 and above)</i>	14.9	1.5	16.0	13.9	14.6	15.3
<i>Male</i>	19.2	2.0	22.8	16.1	17.2	22.1
<i>Female</i>	10.4	1.9	9.4	11.4	11.7	8.8
Education						
Adult literacy rate						
<i>Total</i>	28.9	3.9	39.3	19.4	28.0	30.1
<i>Male</i>	35.8	4.4	48.5	24.7	33.7	38.6
<i>Female</i>	21.7	3.9	30.2	13.5	21.6	21.9
Youth literacy rate (age 15-24)						
<i>Total</i>	44.8	4.4	55.5	33.6	55.8	32.8
<i>Male</i>	56.0	6.2	69.5	42.7	58.7	48.9
<i>Female</i>	35.5	5.1	44.5	25.4	50.8	27.0
Primary school						
<i>Access to School</i>	22.7	5.3	36.4	9.6	17.5	43.1
<i>Primary Gross Enrollment</i>	73.8	7.9	91.9	56.4	74.3	71.5
<i>Male</i>	87.4	8.4	104.6	70.5	89.5	80.7
<i>Female</i>	58.2	9.3	76.9	40.7	58.6	55.9
<i>Primary Net Enrollment</i>	53.3	6.1	67.3	40.0	52.4	57.0
<i>Male</i>	60.3	6.3	73.8	47.1	58.5	65.9
<i>Female</i>	45.4	7.3	59.6	32.1	46.0	41.9
<i>Satisfaction</i>	47.9	6.3	50.0	44.7	48.6	45.4
<i>Primary completion rate</i>	6.9	1.4	8.9	5.0	5.4	12.5
Secondary school						
<i>Access to School</i>	2.3	1.7	4.4	0.0	2.0	2.9
<i>Secondary Gross Enrollment</i>	4.3	1.6	5.4	3.1	4.2	4.5
<i>Male</i>	6.3	2.4	7.7	4.9	6.0	7.6
<i>Female</i>	1.5	1.1	2.6	0.0	0.0	3.0
<i>Secondary Net Enrollment</i>	2.7	1.1	3.3	1.9	2.2	3.8
<i>Male</i>	3.5	1.5	3.9	3.0	3.1	5.4
<i>Female</i>	1.5	1.1	2.6	0.0	0.0	3.0
<i>Satisfaction</i>	60.8	13.7	60.3	61.5	57.2	67.8
<i>Secondary completion rate</i>	0.6	0.6	0.0	1.2	0.8	0.0

Medical services							
	<i>Health access</i>	11.1	4.3	20.1	2.4	6.8	18.3
	<i>Need</i>	28.2	1.6	28.1	28.3	26.7	30.8
	<i>Use</i>	28.2	2.0	32.0	24.6	26.2	31.6
	<i>Satisfaction</i>	78.1	3.6	79.2	76.8	78.6	77.5
	<i>Consulted traditional healer</i>	18.3	3.3	11.4	26.9	20.3	15.5
	<i>Pre-natal care</i>	79.5	6.9	90.2	68.1	83.2	75.4
	<i>Anti-malaria measures used</i>	23.7	4.9	21.6	25.5	18.4	28.9
	<i>Person has physical/mental challenge</i>	0.4	0.1	0.3	0.4	0.4	0.4
Child welfare and health							
Orphanhood (children under 18)							
	<i>Both parents dead</i>	0.1	0.1	0.1	0.1	0.1	0.1
	<i>Father only</i>	6.8	1.3	6.5	7.1	5.5	9.8
	<i>Mother only</i>	0.9	0.5	1.9	0.0	0.3	2.4
Fostering (children under 18)							
	<i>Both parents absent</i>	2.4	0.6	1.8	2.9	1.6	4.3
	<i>Father only absent</i>	10.1	1.7	12.3	8.0	9.0	12.9
	<i>Mother only absent</i>	1.1	0.5	1.9	0.3	0.5	2.6
Children under 5							
	<i>Delivery by health professionals</i>	9.0	2.2	13.9	3.8	4.8	15.6
	<i>Measles immunization</i>	59.0	3.9	61.2	56.6	60.1	57.2
	<i>Fully vaccinated</i>	26.0	4.6	29.2	22.5	26.5	25.1
	<i>Not vaccinated</i>	33.2	3.9	25.4	41.6	35.4	29.9
	<i>Stunted</i>	38.5	4.9	34.0	43.5	37.2	40.5
	<i>Wasted</i>	2.7	0.9	2.9	2.4	3.7	1.0
	<i>Underweight</i>	29.4	3.1	24.0	35.5	27.2	32.8

* 1.96 standard deviations

1 INTRODUCTION

1.1 The Ngorongoro District CWIQ

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

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

CWIQ is an off-the-shelf survey package developed by the World Bank to produce standardised monitoring indicators of welfare. The questionnaire is purposively concise and is designed to collect information on household demographics, employment, education, health and nutrition, as well as utilisation of and satisfaction with social services. An extra section on governance and satisfaction with people in public office was added specifically for this survey.

The standardised nature of the questionnaire allows comparison between districts and regions within and across countries, as well as monitoring change in a district or region over time.

Although beyond the purpose of this

report, the results of Ngorongoro CWIQ could also be set against those of other CWIQ surveys that have are being implemented at the time of writing in other districts in Tanzania: Bariadi DC, Bukoba DC, Bukombe DC, Bunda Chamwino DC 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, Mpwapa DC, Muheza DC, Musoma DC, Ngara DC, Njombe DC, Rufiji DC, Arusha 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 Ngorongoro District CWIQ was sampled to be representative at district level. Data from the 2002 Census was used to put together a list of all villages in the district. In the first stage of the sampling process villages were chosen proportional to their population size. In a second stage the sub-village (kitongoji) was chosen within the village through simple random sampling. In the selected sub-village (also referred to as cluster or enumeration area in this report), all households were listed and 15 households were randomly selected. In total 450 households in 30 clusters were visited. All households were given statistical weights reflecting the number of households that

Table 1.1 Variables Used to Predict Consumption Expenditure in Arusha Region

Basic Variables

Household size
Level of education of the household head
Main source of income
Main activity of the household head

Household Amenities

Number of meals per day
Fuel used for cooking
Use of toothpaste
Type of floor

Household Assets

Ownership of a telephone
Ownership of watches
Ownership of a motor vehicle
Ownership of a wheelbarrow
Land ownership

Village level variables

Proportion of households with piped water
Proportion of households with bank accounts

Source: HBS 2000/2001 for Arusha Region

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

Predicted	Observed		
	Non-Poor	Poor	Total
Non-Poor	61.1	11.2	72.2
Poor	10.1	17.7	27.8
Total	71.2	28.8	100.0

Source: HBS 2000/01 for Arusha Region

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, it is important to highlight that the data entry was done by scanning the questionnaires, to minimise data entry errors and thus ensure high quality in the final dataset.

1.3 Constructed variables to disaggregate tables

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

1.3.1 Poverty Status

The poverty status of a household is obtained by measuring its consumption expenditures and comparing it to a poverty line. It is, however, difficult, expensive and time consuming to collect reliable household consumption expenditure data. One reason for this is that consumption modules are typically very lengthy. In addition, household consumption patterns differ across districts, regions and seasons; hence multiple visits have to be made to the household for consumption data to be reliable.

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

There is a core set of variables that are incorporated in the majority of surveys. These variables inform on household assets and amenities, level of education of the household head, amount of land owned by the household and others. By observing the relation between these variables and consumption expenditure of the household in an expenditure survey, a relationship can be calculated. These variables are called poverty predictors and can be used to determine household expenditure levels in non-expenditure surveys such as CWIQ. This means that, for instance, a household that is headed by an individual who has post secondary school education, with every member in a separate bedroom and that has a flush toilet is more likely to be non-poor than one where the household head has no education, a pit latrine is used and there are four people per bedroom. This is, of course, a very simplified example; however, these are some of the variables used to calculate the relationship between such information and the consumption expenditure of the household.

For the purpose of this report, the data collected in the Household Budget Survey 2000/01 (HBS) was used to select the poverty predictors and determine the quantitative relationship between these and household consumption. The five-year gap is far from ideal, but the data itself is reliable and is the most recent source of information available. Work was then done to investigate the specific characteristics of Ngorongoro in order to ensure that the model developed accurately represents this particular district.

Some caveats are in order when tabulating variables used as poverty predictors on poverty status. Poverty status is defined as a weighted average of the poverty predictors; hence it should come as no surprise that poverty predictors are correlated to them. For instance, education

Table 1.3: Cluster Location

Cluster Location	Median Time (in minutes) to:			Poverty Rate	Estimated Number of Households
	District	All-Weather	Public		
	Capital	Road	Transport		
Remote	180.0	120.0	720.0	49.6	20,835
Accessible	90.0	60.0	360.0	49.4	15,487

Source: CWIQ 2006 Ngorongoro DC

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 Ngorongoro 2006 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

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'.

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 10.1 percent of the cases, and vice versa in 11.2 percent of the households. This gives an overall percentage of correct predictions of 78.7 percent.

When the model is applied to the CWIQ 2006 data for Ngorongoro DC, the share of households living in poverty is 50 percent. These rates are higher than 29 percent estimated for Arusha Region in 2001. However, it must be kept in mind that the aim of the model is not estimating poverty rates, but determining 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.

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

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

Socio-Economic Group	Poverty Rate	Percentage Living in	
		Remote Clusters	Accessible Clusters
Employees	8.6	81.3	18.7
Self-Employed Agriculture	52.4	41.0	59.0
Self-Employed Other	27.0	31.9	68.1
Other	55.1	42.9	57.1

Source: CWIQ 2006 Ngorongoro DC

1 Introduction

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

	Male	Female	Total
Socio-economic Group			
Employees	83.0	17.0	100.0
Self-Employed Agriculture	89.1	10.9	100.0
Self-Employed Other	57.8	42.2	100.0
Other	74.2	25.8	100.0
Total	87.0	13.0	100.0

Source: CWIQ 2006 Ngorongoro DC

trends. The Ngorongoro 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 the median time to the district capital, all-weather road and public transport for remote and accessible villages. Despite differences in distance (obtained by the way the variable is constructed) the poverty rates are similar for both types of villages.

1.3.3 Socio-economic Group

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

employment of the household head. Throughout the report heads employed in the private sectors, formally or informally, as well as Government and Parastatal employees are categorised as 'Employees'. Self-employed individuals are divided into two groups, depending on whether they work in agriculture ('Self-employed agriculture') or in trade or professional sectors ('Self-employed other'). Finally, those who worked in other activities or who had not been working for the 4 weeks preceding the survey are classed as 'other'.

Table 1.4 shows that the poverty rate is highest for households whose main income earner is self-employed in agriculture or in other activities (unemployed, inactive, unpaid or household worker), at rates of 52 and 55 percent, respectively. In turn, poverty is lowest for households where the main income earner is an employee, at 9 percent. In addition, households from the latter group are the most likely to be located in remote villages, at 81 percent, whereas the self-employed in non-agricultural activities are the most likely to be located in accessible villages, at 68 percent.

The gender composition of the socio-economic group is shown in Table 1.5. 87 percent of households are headed by a male. The share of female-headed households is lowest for the self-employed in agriculture at 11 percent and highest for the self-employed in non-agricultural activities at 42 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 79 percent of the household heads is dedicated. Employees are mostly dedicated to mining, manufacturing, energy or construction, with a share of 89 percent. The self-employed in non-agricultural activities are mostly dedicated to services (82 percent). Almost half (45 percent) of the 'other' category is concentrated in agriculture with the rest split between services, household duties and other activities (21, 23 and 11 percent, respectively).

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	11.3	88.7	0.0	0.0	0.0	100.0
Self-Employed Agriculture	87.7	0.3	7.1	4.3	0.6	100.0
Self-Employed Other	7.3	0.0	81.8	0.0	10.9	100.0
Other	44.7	0.0	21.2	23.0	11.2	100.0
Total	79.0	4.7	10.1	4.8	1.4	100.0

Source: CWIQ 2006 Ngorongoro DC

1 Introduction

2 VILLAGE, POPULATION AND HOUSEHOLD CHARACTERISTICS

2.1 Introduction

This chapter provides an overview of the Ngorongoro 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, 7 percent of the population is over 60 years old, whereas 49 percent is under 15 years old. The remaining 43 percent is between 15 and 59 years old. Poor households report higher shares in the 0-14 group and less in then 15-59 group than non-poor households.

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 overall dependency ratio is 1.2, meaning that one adult has to take care of more than 1 person. Poor households present a higher dependency ratio than non-poor households (1.5 and 0.8, respectively).

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 self-employed in agriculture and the 'other' have the highest dependency ratio (1.2), whereas the employees have the lowest (0.6).

The breakdown by gender of the household head shows that the dependency ratio in female-headed households is higher than in male-headed households, at 1.3 and 1.2, respectively.

Table 2.3 shows the percent distribution of households by number of household members. The mean household size is 4.8 individuals. Households with at most two individuals only represent 12 percent of all households in the district. The figure for households with 7 or more members is 21 percent.

The breakdown by cluster location shows that households in accessible villages tend to be larger than households in remote villages, with means of 5.1 and 4.5

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

	Male				Female				Total			
	0-14	15-59	60+	Total	0-14	15-59	60+	Total	0-14	15-59	60+	Total
Total	26.1	20.7	5.1	52.0	23.6	22.6	1.8	48.0	49.8	43.3	6.9	100.0
Cluster Location												
Accessible	26.1	20.6	4.0	50.7	24.6	23.0	1.7	49.3	50.7	43.5	5.7	100.0
Remote	26.1	20.9	6.1	53.1	22.8	22.2	1.9	46.9	48.9	43.1	8.0	100.0
Poverty Status												
Poor	28.8	18.2	5.5	52.4	26.8	19.8	1.0	47.6	55.6	38.0	6.4	100.0
Non-poor	21.6	25.0	4.5	51.1	18.3	27.3	3.3	48.9	39.9	52.3	7.8	100.0

Source: CWIQ 2006 Ngorongoro DC

2 Village, population and household characteristics

Table 2.2: Dependency ratio

	0-4 years	5-14 years	0-14 years	15-64 years	65+ years	Total	Dependency ratio
Total	0.9	1.4	2.4	2.2	0.2	4.8	1.2
Cluster Location							
Accessible	1.0	1.5	2.6	2.3	0.2	5.1	1.2
Remote	0.9	1.4	2.2	2.1	0.2	4.5	1.1
Poverty Status							
Poor	1.1	2.2	3.4	2.5	0.3	6.1	1.5
Non-poor	0.7	0.7	1.4	1.9	0.1	3.5	0.8
Household size							
1-2	0.0	0.0	0.0	1.4	0.3	1.7	0.2
3-4	0.9	0.6	1.5	2.0	0.2	3.6	0.8
5-6	1.2	1.9	3.1	2.1	0.2	5.4	1.5
7+	1.2	3.1	4.3	3.2	0.2	7.7	1.4
Socio-economic Group							
Employee	0.7	0.7	1.4	2.2	0.0	3.6	0.6
Self-employed - agric	1.0	1.5	2.5	2.2	0.2	4.9	1.2
Self-employed - other	0.9	1.0	1.9	2.3	0.2	4.4	0.9
Other	0.6	1.4	2.0	2.1	0.5	4.6	1.2
Gender of Household Head							
Male	1.0	1.4	2.4	2.2	0.2	4.8	1.2
Female	0.8	1.5	2.2	1.9	0.2	4.3	1.3

Source: CWIQ 2006 Ngorongoro 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	12.1	37.0	30.2	20.7	100.0	4.8
Cluster Location						
Accessible	10.6	33.1	30.2	26.0	100.0	5.1
Remote	13.4	40.2	30.2	16.1	100.0	4.5
Poverty Status						
Poor	0.0	16.0	44.8	39.1	100.0	6.1
Non-poor	24.1	57.3	16.0	2.6	100.0	3.5
Socio-economic Group						
Employee	37.1	28.5	27.4	6.9	100.0	3.6
Self-employed - agric	10.7	37.4	29.8	22.2	100.0	4.9
Self-employed - other	12.9	43.2	32.3	11.6	100.0	4.4
Other	13.9	33.0	39.6	13.5	100.0	4.6
Gender of Household Head						
Male	10.7	37.1	30.9	21.3	100.0	4.8
Female	21.9	36.1	25.4	16.6	100.0	4.3

Source: CWIQ 2006 Ngorongoro DC

members, respectively. The difference by poverty status is more pronounced, with poor households reporting a mean household size of 6.1 members, and non-poor households reporting 3.5.

Regarding socio-economic groups, the employees have the lowest mean household size, at 3.6, and the self-employed in agriculture have the highest at 4.9 members.

Finally, households headed by males are larger than female-headed households: the former have 4.8 members in average, whereas the latter have only 4.3 members.

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

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

	Head	Spouse	Child	Parents	Other relative	Not related	Total
Total	21.0	17.5	56.2	1.2	3.7	0.5	100.0
Cluster Location							
Accessible	19.7	15.9	57.8	1.4	4.4	0.9	100.0
Remote	22.2	19.0	54.6	1.0	3.1	0.1	100.0
Poverty Status							
Poor	16.4	14.7	63.9	1.0	3.8	0.2	100.0
Non-poor	28.8	22.2	42.9	1.5	3.6	1.0	100.0
Age							
0- 9	0.0	0.0	94.2	0.0	5.7	0.1	100.0
10-19	0.7	8.6	85.0	0.0	4.6	1.1	100.0
20-29	21.7	54.1	19.3	0.0	3.4	1.5	100.0
30-39	52.5	44.0	2.4	0.9	0.0	0.2	100.0
40-49	62.5	33.3	0.4	3.4	0.4	0.0	100.0
50-59	71.6	18.7	0.0	9.6	0.0	0.0	100.0
60 and above	81.6	9.8	0.0	7.3	1.3	0.0	100.0
Gender							
Male	35.1	0.7	60.7	0.1	3.4	0.0	100.0
Female	5.7	35.7	51.3	2.3	4.0	1.0	100.0

Source: CWIQ 2006 Ngorongoro DC

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	29.8	24.4	39.2	0.1	0.0	0.7	5.8	100.0
Cluster Location								
Accessible	33.2	27.2	32.4	0.1	0.0	1.0	6.0	100.0
Remote	26.5	21.8	45.6	0.0	0.0	0.4	5.6	100.0
Poverty Status								
Poor	38.3	15.9	40.8	0.0	0.0	0.9	4.1	100.0
Non-poor	17.4	36.9	36.8	0.2	0.0	0.5	8.2	100.0
Age								
12-14	99.6	0.4	0.0	0.0	0.0	0.0	0.0	100.0
15-19	79.0	16.4	4.5	0.0	0.0	0.0	0.0	100.0
20-24	35.8	36.3	27.0	0.3	0.0	0.6	0.0	100.0
25-29	13.0	39.3	43.4	0.3	0.0	1.6	2.5	100.0
30-39	3.0	37.9	55.7	0.0	0.0	0.2	3.2	100.0
40-49	1.3	23.2	64.2	0.0	0.0	0.8	10.6	100.0
50-59	0.0	16.3	64.0	0.0	0.0	3.5	16.2	100.0
60 and above	0.0	14.0	64.0	0.0	0.0	0.7	21.3	100.0
Gender								
Male	38.5	23.3	37.0	0.1	0.0	0.1	1.0	100.0
Female	20.0	25.7	41.6	0.1	0.0	1.4	11.2	100.0

Source: CWIQ 2006 Ngorongoro DC

by analysing by cluster location. However, the analysis by poverty status shows that the share of 'child' is higher in poor households, whereas non-poor households report higher shares of 'head' and 'spouse'.

When analysing by age-groups, it is observed that the category 'other relatives' peaks for the 0-9 and 10-19 cohorts. This

highlights the importance of the analysis of foster 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 35 and 6 percent, respectively. In turn, females are more likely to be spouses to the household head

2 Village, population and household characteristics

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	1.6	25.0	1.3	72.2	100.0
Cluster Location					
Accessible	2.5	23.0	0.9	73.6	100.0
Remote	0.7	26.7	1.7	70.9	100.0
Poverty Status					
Poor	0.3	20.8	0.5	78.4	100.0
Non-poor	3.9	32.3	2.6	61.2	100.0
Age					
5- 9	0.0	0.0	0.0	100.0	100.0
10-14	0.0	0.0	0.0	100.0	100.0
15-19	0.0	1.9	1.3	96.8	100.0
20-29	3.1	24.0	1.1	71.7	100.0
30-39	4.3	48.3	3.4	44.0	100.0
40-49	3.7	59.8	2.3	34.2	100.0
50-59	2.1	68.6	1.0	28.4	100.0
60 and above	0.7	73.6	3.3	22.5	100.0
Gender					
Male	2.3	41.4	1.2	55.2	100.0
Female	0.8	6.6	1.4	91.2	100.0

Source: CWIQ 2006 Ngorongoro DC

than males, at rates of 36 and 1 percent, respectively.

Table 2.5 shows the percent distribution of the population age 12 and above by marital status. Overall, 30 percent of the population has never been married. In addition, 24 percent is married and monogamous, 39 percent is married and polygamous, 1 percent is separated and 6 percent is widowed.

The breakdown by cluster location shows that the people of remote villages are more likely to be married-polygamous than the people in accessible villages, who are more likely to have never been married or to be in a monogamous marriage.

The breakdown by poverty status shows that members of poor households are more likely to have never been married or to be in a polygamous marriage, 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 for the 40+ groups, at 64 percent, being the most common category for people after 25 years of age. For the population in the 20-24 age-group, married-monogamous and never married are the most common categories. As would be expected the

'widowed' shows higher shares for the older cohorts. 'Never married' also shows correlation with age, decreasing as the population gets older.

Around 39 percent of the men have never been married, but for women the figure is only 20 percent. In turn, women are more likely to be in a polygamous marriage. While 11 percent of women are widowed and 1 percent separated, the shares for males are 1 and 0 percent, respectively.

Table 2.6 shows the percent distribution of the population age 5 and above by socio-economic group. Overall, 25 percent of the population is self-employed in agriculture, with 72 percent in other activities. Individuals living in remote villages seem to be somewhat more likely to be self-employed in agriculture, as non-poor households. In turn, accessible villages and poor households report higher shares in the 'other' category.

The analysis of the age-groups is particularly interesting. The share of self-employed in agriculture tends to increase with age, peaking at 74 percent for the 60+ cohort. On the contrary, the category 'other' tends to decrease with age, showing a sharp decrease between 20-29 to 30-39, from 72 to 44 percent.

The gender breakdown shows that males are more likely to be self-employed in agriculture than women. In turn, females are more likely to be in the 'other' category, with a share of 91 percent against 55 percent for the males.

Table 2.7 shows the percent distribution of the population aged 5 and above by highest level of education. Roughly two thirds (67 percent) of the population have

no education, 17 percent has some primary, and 13 percent has completed primary. The remaining levels have shares of at most 2 percent each.

The breakdown by cluster location shows that accessible villages report higher shares in some primary and completed primary, whereas remote villages report a higher share with no formal education.

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	66.9	1.6	16.5	12.6	1.6	0.1	0.6	100.0
Cluster Location								
Accessible	56.5	2.3	20.3	17.6	2.2	0.1	1.0	100.0
Remote	76.8	0.9	12.9	8.0	1.1	0.1	0.2	100.0
Poverty Status								
Poor	66.3	2.0	20.1	10.9	0.5	0.1	0.0	100.0
Non-poor	67.9	0.8	10.1	15.8	3.6	0.1	1.6	100.0
Age								
5- 9	81.8	5.5	12.7	0.0	0.0	0.0	0.0	100.0
10-14	33.6	2.0	61.7	2.8	0.0	0.0	0.0	100.0
15-19	46.5	0.0	27.6	23.5	2.4	0.0	0.0	100.0
20-29	65.6	0.0	4.4	23.6	4.8	0.6	0.9	100.0
30-39	64.1	0.0	4.5	27.6	1.7	0.0	2.1	100.0
40-49	75.1	0.0	2.9	17.9	2.6	0.0	1.5	100.0
50-59	84.4	0.0	5.3	7.9	1.7	0.0	0.7	100.0
60 and above	92.2	0.0	5.1	2.7	0.0	0.0	0.0	100.0
Gender								
Male	61.0	1.7	20.4	13.7	2.2	0.2	0.8	100.0
Female	73.5	1.5	12.2	11.5	1.0	0.0	0.3	100.0

Source: CWIQ 2006 Ngorongoro DC

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	4.0	32.0	52.3	0.1	11.5	100.0
Cluster Location						
Accessible	4.1	37.7	45.1	0.2	12.9	100.0
Remote	3.9	27.3	58.5	0.0	10.4	100.0
Poverty Status						
Poor	1.1	24.7	65.2	0.0	9.1	100.0
Non-poor	6.9	39.4	39.5	0.2	14.0	100.0
Age						
15-19	100.0	0.0	0.0	0.0	0.0	100.0
20-29	13.5	59.5	18.8	0.6	7.6	100.0
30-39	4.2	49.3	41.7	0.0	4.7	100.0
40-49	1.4	24.4	60.1	0.0	14.1	100.0
50-59	0.0	19.1	66.9	0.0	14.1	100.0
60 and above	0.0	12.5	70.0	0.0	17.5	100.0
Gender						
Male	3.5	36.4	58.4	0.1	1.6	100.0
Female	7.1	2.8	11.6	0.0	78.4	100.0

Source: CWIQ 2006 Ngorongoro DC

2 Village, population and household characteristics

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

	Employed	Self-employed Agriculture	Self-employed Other	Other	Total
Total	4.7	87.2	3.7	4.5	100.0
Cluster Location					
Accessible	8.3	84.4	2.5	4.8	100.0
Remote	1.6	89.5	4.6	4.3	100.0
Poverty Status					
Poor	0.8	92.2	2.0	5.0	100.0
Non-poor	8.5	82.2	5.3	4.0	100.0
Age					
15-19	0.0	30.0	0.0	70.0	100.0
20-29	7.0	91.4	1.6	0.0	100.0
30-39	8.3	84.4	5.4	2.0	100.0
40-49	5.9	89.8	3.7	0.6	100.0
50-59	3.0	91.5	1.3	4.2	100.0
60 and above	0.0	84.8	4.4	10.8	100.0
Gender					
Male	4.5	89.3	2.4	3.9	100.0
Female	6.1	73.0	11.9	9.0	100.0

Source: CWIQ 2006 Ngorongoro DC

The breakdown by poverty status shows that poor households have a higher in 'some primary' than non-poor households, who in turn have a higher share in 'completed primary' and 'some secondary'.

The age breakdown shows that 82 percent of the children between 5 and 9 have no formal education, but 62 percent of the children in the 10-14 age-group have at least some primary. Rates of no education are lowest for the latter cohort (34 percent) and higher for the older groups. Completed primary peaks at 28 percent for the 30-39 age-group.

The gender breakdown shows that females have a higher share of uneducated population than males: 74 against 61 percent. In turn, the share of males reporting some primary is higher than that of females (20 and 12 percent, respectively).

2.4 Main Characteristics of the Heads of Household

Table 2.8 shows the percent distribution of household heads by marital status. Overall, 52 percent of the household heads is married and polygamous, 32 percent married and monogamous, 11 divorced, separated or widowed, and 4 percent has never been married.

The breakdown by cluster location shows that accessible villages report higher shares in the 'married-monogamous' category, whereas remote clusters report a higher share in the 'married-polygamous' category.

The breakdown by poverty status shows that heads of poor households are more likely to be in a polygamous marriage. In turn, heads of non-poor households are more likely to be in a monogamous marriage.

Analysis by age-groups shows that married-monogamous is the category with the highest share of household heads in the cohorts between 20 and 39 old. For the cohorts from 40 onwards, the married-polygamous category reports the highest shares.

Most female household heads are divorced, separated or widowed (78 percent), whereas for males, this category roughly represents 2 percent. Most male household heads are married, monogamous or polygamous (94 percent).

Table 2.9 shows the percent distribution of household heads by socio-economic group. It is worth remembering that the socio-economic group of the household is determined by the type of employment of the main income earner of the household, who not always is the household head. As expected, the great majority of the

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	71.0	5.9	18.9	2.2	0.2	1.8	100.0
Cluster Location							
Accessible	59.3	6.6	28.1	2.3	0.3	3.2	100.0
Remote	80.9	5.3	11.2	2.0	0.0	0.6	100.0
Poverty Status							
Poor	78.3	5.8	15.9	0.0	0.0	0.0	100.0
Non-poor	63.7	6.1	22.0	4.3	0.3	3.6	100.0
Age							
15-19	74.8	25.2	0.0	0.0	0.0	0.0	100.0
20-29	60.3	4.6	26.7	4.6	1.1	2.8	100.0
30-39	54.8	6.5	33.9	1.6	0.0	3.2	100.0
40-49	67.0	4.1	22.4	4.1	0.0	2.4	100.0
50-59	80.7	7.5	8.5	2.3	0.0	1.0	100.0
60 and above	90.5	6.2	3.3	0.0	0.0	0.0	100.0
Gender							
Male	68.6	6.3	20.9	2.3	0.2	1.8	100.0
Female	87.2	3.6	6.1	1.6	0.0	1.6	100.0

Source: CWIQ 2006 Ngorongoro DC

district's household heads belongs to the self-employed in agriculture, with a share of 87 percent. The self-employed in non-agricultural activities represent 4 percent of the household heads, the 'other' category (unemployed, inactive and household workers) represents 5 percent, and the employees are a further 5 percent. The analysis by cluster location shows that the share of household heads self-employed in agriculture in remote villages is higher than in accessible villages, with shares of 88 and 83 percent, respectively. In accessible villages, household heads are more likely to be in the 'employee' group than heads of households in remote villages, with shares of 8 and 2 percent, respectively.

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

The breakdown by age of the household head shows interesting insights. First, it is important to notice that the small number of household heads aged 15 to 19 impedes drawing solid statistical conclusions about them, so they will be excluded from the following discussion. For all age-groups, 'self-employed agriculture' is the most important category, representing at least 4 out of 5 household heads in each age-

group. The 'employee' category decreases with age. The 'other' category gains importance in the 60+ age-group, with a share 11 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 agriculture than in female-headed households. In the latter, the main income earner is more likely to be self-employed in non-agricultural activities or in the 'other' socio-economic group.

Table 2.10 shows the percent distribution of the heads of household by highest level of education. Overall, around only 4 percent of the household heads has any education after primary. 71 percent of the household heads has no education, 6 percent some primary and 19 percent has completed primary.

The breakdown by cluster location shows that, as would be expected, household heads in remote villages are more likely to have no education than the ones from accessible villages, with shares of 81 and 59 percent, respectively. Furthermore, household heads in accessible villages are more likely to have complete primary education, with a share of 28 percent against 11 percent of household heads in remote villages.

2 Village, population and household characteristics

Table 2.11 - Orphan status of children under 18 years old

	Children who lost mother only	Children who lost father only	Children who lost both father & mother
Total	0.9	6.8	0.1
Cluster Location			
Accessible	1.9	6.5	0.1
Remote	0.0	7.1	0.1
Poverty Status			
Poor	0.3	5.5	0.1
Non-poor	2.4	9.8	0.1
Age			
0-4	0.4	3.6	0.0
5-9	1.1	5.8	0.2
10-14	0.7	11.5	0.0
15-17	2.8	13.5	0.4
Gender			
Male	1.4	7.1	0.0
Female	0.4	6.4	0.2

Source: CWIQ 2006 Ngorongoro DC

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 78 percent of heads of poor households has no education, the share for non-poor is 64 percent. In the other extreme, whereas 8 percent of non-poor household heads has post-secondary studies, the share for poor household heads is virtually null.

The age breakdown shows that 91 percent of household heads aged 60 or over has no education. Completed primary peaks at 34 percent for the 30-39 group and some primary at 25 percent for the 15-19 age-group.

The analysis by gender shows that female household heads are more likely to have no education than males, with rates of 87 and 69 percent, respectively. 20 percent of the male household heads has completed primary, against 6 percent of female household heads.

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, virtually no child lost both parents, 1 percent lost

only their mother and 7 percent lost only their father. This amounts to 8 percent of all children under 18 who lost at least one parent at the time of the survey.

The age breakdown shows that orphan status is correlated with age: as can be expected older children are more likely to be orphans than younger children. Around 17 percent of the children between 15 and 17 years lost a parent, and 14 percent of the children in that age-group lost their father. There does not seem to be a gender trend in orphan status.

The percent distribution of children under 18 years old by foster status is shown in Table 2.12. A child is defined as living in a nuclear household when both parents live in the household and as living in a non-nuclear household when at least one parent is absent from the household. Note that this makes it a variable defined at the level of the child, rather than the household (a household may be nuclear with respect to one child, but not with respect to another). The table shows that 14 percent of children under 18 were living in non-nuclear households at the time of the survey.

The breakdown by cluster location shows that 11 percent the children from remote clusters and 16 percent of children from accessible clusters live in non-nuclear households. In addition, children from non-poor households tend to be fostered more often than children from poor households (with shares of 20 and 11 percent, respectively).

There appears to be no strong correlation between gender and foster status. The analysis of age-groups shows that the share of children living in non-nuclear households increases with age, from 11 to 25 percent, but is lower and relatively constant for children living with their father only.

Table 2.12 - Foster status of children under 18 years old

	Children living with mother only	Children living with father only	Children living with no parents	Children living in non-nuclear households
Total	10.1	1.1	2.4	13.6
Cluster Location				
Accessible	12.3	1.9	1.8	16.0
Remote	8.0	0.3	2.9	11.2
Poverty Status				
Poor	9.0	0.5	1.6	11.0
Non-poor	13.0	2.6	4.3	19.8
Age				
0-4	8.4	0.4	2.0	10.9
5-9	8.3	1.5	2.1	11.9
10-14	14.6	0.7	1.6	17.0
15-17	14.8	2.8	7.0	24.6
Gender				
Male	10.1	1.3	1.2	12.6
Female	10.2	0.8	3.8	14.8

Source: CWIQ 2006 Ngorongoro DC

2 Village, population and household characteristics

3 EDUCATION

This chapter examines selected education indicators in Ngorongoro DC. 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 29 percent. Literacy rates differ between accessible and remote villages at 39 and 19 percent respectively. Likewise, the literacy rate among non-poor households is slightly higher than that of poor households at 30 and 28 percent respectively.

The breakdown by socio-economic group of the household shows that literacy rates are higher among households where the main income earner is an employee (73 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 14 percentage points higher than that of women at 36 percent and 22 percent respectively.

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

Orphaned children have a literacy rate of 37 percent, whereas the rate for non-orphaned is 21 points higher, at 58 percent. Finally, 58 percent of non-fostered children are literate compared to 26 percent of fostered children.

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. Overall, 23 percent of primary school-age children live within 30 minutes of a primary school. Primary school access is remarkably higher in accessible clusters than in remote clusters, at 36 and 10 percent respectively.

43 percent of children aged 7 to 13 living in non-poor households live within 30 minutes of the nearest primary school compared to 18 percent of those living in poor households.

The breakdown by socio-economic group shows that 90 percent of children living in households belonging to the 'employee' category live within 30 minutes of the nearest primary school compared to 44 percent of the children living in households where the main income earner belongs to the 'other' category and 19 percent of children living in households belonging to the 'self-employed agriculture' category.

The gender breakdown shows that women have a higher rate of access to primary schools than men, with rates of 25 and 20 percent.

Orphaned children have a higher access rate to primary schools than non-orphaned, at 43 and 21 percent respectively. Similarly, 23 percent of non-fostered children have access to primary schools, whereas the rate for fostered is 13 percent.

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	28.9	22.7	73.8	53.3	47.9	1.6	4.3	2.7	60.8
Cluster Location									
Accessible	39.3	36.4	91.9	67.3	50.0	3.1	5.4	3.3	60.3
Remote	19.4	9.6	56.4	40.0	44.7	0.0	3.1	1.9	61.5
Poverty Status									
Poor	28.0	17.5	74.3	52.4	48.6	1.4	4.2	2.2	57.2
Non-poor	30.2	43.1	71.5	57.0	45.4	2.2	4.5	3.8	67.8
Socio-economic Group									
Employee	73.3	89.6	93.6	79.2	52.8	0.0	27.8	27.8	73.3
Self-employed - agriculture	26.9	19.4	71.8	52.5	47.1	0.8	2.9	1.7	64.8
Self-employed - other	40.9	68.8	103.8	66.6	49.7	0.0	6.1	6.1	100.0
Other	17.8	43.9	94.1	54.9	59.5	18.0	11.1	0.0	0.0
Gender									
Male	35.8	20.3	87.4	60.3	50.4	0.4	6.3	3.5	60.3
Female	21.7	25.4	58.2	45.4	43.7	3.3	1.5	1.5	63.6
Orphan status									
Orphaned	36.7	42.6	86.3	56.6	44.3	0.0	2.6	2.6	100.0
Not-orphaned	57.5	20.9	71.7	53.0	47.8	2.2	1.7	1.7	80.9
Foster status									
Fostered	26.0	12.5	36.4	36.4	100.0	3.9	0.0	0.0	0.0
Not-fostered	58.4	22.8	73.3	53.4	47.4	1.6	2.0	2.0	85.5

Source: CWIQ 2006 Ngorongoro 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.

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 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.

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

	Reasons for dissatisfaction								
	Percent dissatisfied	Books/ supplies	Poor Teaching	Lack of teachers	Teachers absent	Lack of space	Facilities in bad condition	High fees	Other
Total	49.7	52.7	15.2	66.3	0.9	22.4	51.8	0.8	0.3
Cluster Location									
Accessible	48.5	55.5	11.2	70.1	1.5	16.9	45.3	0.4	0.5
Remote	51.4	48.8	20.9	61.0	0.0	29.9	60.8	1.3	0.0
Poverty Status									
Poor	50.6	52.9	14.4	65.9	1.1	23.3	54.7	0.0	0.0
Non-poor	47.0	51.9	18.1	67.5	0.0	19.3	42.3	3.2	1.2
Socio-economic Group									
Employee	32.3	38.9	0.0	61.4	0.0	0.0	38.6	22.5	11.1
Self-employed - agriculture	51.0	51.7	14.3	66.0	1.0	24.2	51.5	0.2	0.0
Self-employed - other	48.6	58.0	31.6	62.3	0.0	15.8	69.3	0.0	0.0
Other	41.1	79.0	32.0	79.0	0.0	0.0	50.5	0.0	0.0
Gender									
Male	46.3	52.7	15.6	72.6	0.0	18.3	49.1	1.3	0.0
Female	55.1	52.7	14.8	57.8	2.0	27.8	55.4	0.0	0.6
Type of school									
Primary	52.1	51.2	17.7	70.5	0.5	24.0	49.3	0.7	0.0
Government	51.9	51.8	17.2	70.5	0.5	24.2	49.4	0.7	0.0
Private	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	69.8	0.0	67.4	67.4	0.0	0.0	32.6	0.0	0.0
Secondary	39.2	86.2	33.7	45.8	0.0	13.8	13.8	0.0	13.8
Government	37.9	84.0	39.0	53.2	0.0	0.0	16.0	0.0	16.0
Private	100.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	42.7	55.4	3.0	50.7	2.3	16.5	66.4	1.1	0.0
Government	42.2	49.3	0.0	39.6	0.0	20.9	83.2	1.7	0.0
Private	50.2	80.4	0.0	100.0	0.0	15.3	15.3	0.0	0.0
Other	39.3	58.0	17.6	51.7	13.6	0.0	44.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

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

The primary school GER was 74 percent at the time of the survey. This figure indicates that all individuals who were at primary school constitute 74 percent of all children of primary school-age in the district. The NER shows that 53 percent of all primary school-age children were attending school.

While the GER for households located in accessible clusters is 92 percent, the figure for households located in remote clusters is 56 percent. Similarly, NER for households in accessible clusters is higher than that of households in remote clusters at 67 and 40 percent respectively. Furthermore, while GER for poor households is 74 percent, the rate for non-poor households is 72 percent. In contrast, NER for non-poor households is higher than that of poor households at 57 and 52 percent respectively.

GER is highest among people living in households belonging to the 'self-employed other' category at 104 and NER is highest among households where the main income earner is an employee at 79 percent. On the other hand, GER and NER are lowest among households where the main income earner belongs to the 'self-employed agriculture' category at 72 and 53 percent respectively.

Furthermore, while GER for males is 87 percent, the rate for females is 58 percent. Likewise, males have higher NER than females at 60 and 45 percent respectively.

Surprisingly, the breakdown by orphan status shows higher GER and NER for orphaned children. On the other hand non-fostered children have a remarkably higher GER than fostered children at 73 and 36 percent respectively. Likewise, while NER for non-fostered children is 53, the share for fostered children is 36 percent. It is

worth noting that the small sample size in the orphan and foster category (see chapter 2) must be kept in mind, and that orphaned and fostered children have a higher mean age than non-orphaned and non-fostered children, respectively.

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 school.

48 percent of all primary school pupils were satisfied with their schools. A higher share of pupils living in accessible clusters reported to be satisfied with school than pupils living in remote clusters, at 50 and 45 percent respectively. Likewise, while 49 percent of pupils living in poor households reported to be satisfied with school, the share for pupils living in non-poor households is 45 percent.

The breakdown by socio-economic group of the household shows that pupils living in households belonging to the 'other' category have the highest rate of satisfaction with primary school at 60 percent, while pupils living in households where the main income earner is self-employed in agriculture have the lowest satisfaction rate at 47 percent.

Furthermore, 48 percent of non-orphaned children reported to be satisfied with their primary schools compared to 44 percent of orphaned children. On the other hand, virtually all fostered children reported to be satisfied with their primary schools compared to 47 percent of non-fostered children.

Lastly, the rate of satisfaction with primary school among males is higher than among females, at 50 and 44 percent, respectively.

3.1.3 Secondary school Access, Enrolment and Satisfaction

Access

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

Only 2 percent of all pupils in secondary school live within 30 minutes of the nearest secondary school. While 3 percent of pupils living in accessible villages live within 30 minutes of the nearest secondary school, the share for pupils living in remote villages is virtually null. There are no strong differences by poverty status.

The socio-economic status of the household seems to be strongly correlated with the secondary school access rate. While pupils living in households belonging to the 'other' category have the highest rate of access to secondary school at 18 percent, followed by those who belong to the 'self-employed agriculture' category (1 percent) the shares for the self-employed in non-agricultural activities and the employees are virtually null.

The rate of access to secondary school for women is 3 percent, whereas the share for males is virtually null. The access rate for non-orphaned children is 2 percent whereas, the share for non-orphaned children is virtually null. Likewise, while 4 percent of fostered children live within 30 minutes of the nearest secondary school, the share for non-fostered children is 2 percent.

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.

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	14.1	34.0	3.0	15.4	13.6	2.1	0.9	11.7	7.4	33.1	26.8	0.0
Cluster Location												
Accessible	12.9	28.8	5.5	25.2	18.5	0.0	1.7	6.8	9.8	43.1	31.5	0.0
Remote	15.8	40.1	0.0	3.6	7.8	4.6	0.0	17.7	4.6	21.0	21.2	0.0
Poverty Status												
Poor	12.0	33.0	4.6	18.7	16.4	3.2	1.4	0.0	11.5	37.3	24.8	0.0
Non-poor	20.4	35.6	0.0	9.3	8.6	0.0	0.0	33.3	0.0	25.4	30.4	0.0
Socio-economic Group												
Employee	27.7	0.0	0.0	24.1	0.0	0.0	0.0	0.0	0.0	24.1	75.9	0.0
Self-employed - agric	13.1	33.4	3.6	12.5	13.8	2.5	0.0	9.2	9.0	34.0	26.2	0.0
Self-employed - other	35.3	65.5	0.0	34.5	23.0	0.0	0.0	42.5	0.0	34.5	0.0	0.0
Other	3.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Gender												
Male	13.2	30.2	5.2	9.6	13.0	3.7	0.0	0.0	10.4	30.7	31.1	0.0
Female	15.5	39.1	0.0	23.1	14.5	0.0	2.2	27.5	3.5	36.3	21.1	0.0
Age												
7-13	1.3	51.1	0.0	0.0	0.0	33.7	0.0	0.0	0.0	0.0	66.3	0.0
14-19	39.2	32.8	3.2	16.4	14.5	0.0	1.0	12.5	7.9	35.3	24.2	0.0

Source: CWIQ 2006 Ngorongoro DC

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

The GER and NER at secondary school are very low compared to primary school level. Overall, GER was 4 percent and NER was 3 percent. While secondary school NER does not show strong correlation with cluster location, the secondary school GER for households located in accessible clusters is 2 percentage points higher than that of households located in remote clusters. NER is higher in non-poor households than in poor households, with a difference of 2 percentage points. On the other hand, GER does not show strong correlation with poverty status.

The breakdown by socio-economic group of the household shows that with the employees have the highest GER and NER at 28 percent, whereas the NER for the 'other' category is virtually null and GER for the 'self-employed agriculture' is 3 percent. GER is higher among male than female-headed households, with a difference rate of 4 percentage points. Similarly, the NER rate is 2 percentage points higher among male-headed households than female-headed households.

Finally, the GER and NER rates do not show important differences between

orphaned and non-orphaned children. On the other hand, while the GER and NER for non-fostered children is 2 percent, the share for fostered children is virtually null.

Satisfaction

The majority (61 percent) of the total population enrolled in secondary schools are satisfied with secondary school. 39 percent of this population reports to be dissatisfied with the secondary schools they attend. This satisfaction rate is higher than in primary schools (48 percent). Cluster location does not show strong correlation with satisfaction rate. On the other hand, 68 percent of pupils living in non-poor households reported to be satisfied with the secondary schools they attend, compared to 57 percent of those living in poor households.

The breakdown by socio-economic group shows that virtually all secondary school pupils living in households belonging to the 'self-employed other' category are satisfied with school, while the share for those living in households where the main income earner belongs to the 'other' category is virtually null.

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

	Net enrollment rates			Drop out rates		
	Male	Female	Total	Male	Female	Total
Total	60.3	45.4	53.3	0.5	1.2	0.9
7	29.7	23.3	26.9	0.0	0.0	0.0
8	62.1	42.1	51.3	0.0	0.0	0.0
9	62.0	59.2	60.6	0.0	0.0	0.0
10	64.3	47.1	55.5	0.0	0.0	0.0
11	77.0	68.7	73.9	0.0	0.0	0.0
12	78.8	51.2	68.6	3.4	0.0	2.2
13	79.6	52.5	67.8	0.0	14.4	6.3

Source: CWIQ 2006 Ngorongoro DC

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

Almost two thirds (64 percent) of female pupils are satisfied with secondary school compared to 60 percent male pupils.

Among the individuals enrolled in secondary schools, orphaned children were more satisfied with their schools than non-orphaned children. While all (100 percent) orphaned children are satisfied with their schools, the share for non-orphaned children is 81 percent. Similarly, while 86 percent of non-fostered children reports to be satisfied with their secondary schools, the share for fostered children is virtually null.

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.

Overall, 50 percent of the students who were enrolled in either primary or secondary school reported dissatisfaction with the schools they were attending. 66 percent of students reported lack of teachers as the cause of their dissatisfaction. In addition, 53 percent reported dissatisfaction due to lack of books and supplies whereas, 53 percent

reported bad condition of facilities. While 22 percent reported dissatisfaction due to lack of space, 15 percent reported poor teaching.

Cluster location does not show strong correlation with dissatisfaction rate. On the other hand, dissatisfaction rate for people living in poor households is higher than that of people living in non-poor households at 51 and 47 percent respectively. Further breakdown of data shows that the dissatisfaction rate due to bad condition of facilities among poor households is higher than that among non-poor households at 55 and 42 percent respectively. On the other hand, while 70 percent of people living in accessible clusters reported dissatisfaction due to lack of teachers, the share for those living in remote clusters is 61 percent. In contrast, 61 percent of people living in remote clusters reported dissatisfaction due to facilities in bad condition compared to 45 percent of people living in accessible clusters.

The breakdown by socio-economic group shows that the dissatisfaction rate among households belonging to the 'self-employed agriculture' category is the highest (51 percent). At the same time the 'employee' socio-economic group reported the lowest dissatisfaction rate (32 percent). It is also observed that 79 percent households belonging to the 'other' category reported dissatisfaction due to lack of teachers compared to 61 percent of households where the main income earner is an employee.

Females have a higher dissatisfaction rate than males at 55 and 46 percent respectively. However further breakdown of data shows that the dissatisfaction rate due lack of teachers among males is

higher than that among females at 73 and 58 percent respectively.

Those attending primary school reported to be most dissatisfied due to lack of teachers (71 percent) followed by lack of books and supplies (51 percent) while those attending secondary schools reported dissatisfaction due to lack of books and supplies (86 percent) followed by lack of teachers (46 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 14 percent of 7 to 19 year olds who were not attending school. Around 34 percent of the non-attending population did not attend because they had completed standard seven, O-level or A-level. 33 percent reported that they had failed standard four, seven or form four exams and 27 percent said they were awaiting admission. 15 percent of respondents were not attending due to cost. While 14 percent were not attending due to work, 12 percent of respondents were not attending because they had gotten married. 7 percent reported not attending because school was useless or uninteresting and none of the respondents reported non-attendance due dismissal.

While 16 percent of children living in remote villages do not attend school, the share for children living in accessible villages is 13 percent. On the other hand, 20 percent of children in non-poor households do not attend school compared to 12 percent of poor households. Further breakdown of data shows that 36 percent

of children living in non-poor households were not attending school because they had completed standard seven, O-level or A-level compared to 33 percent of those living in poor households. Likewise, while 40 percent of children living in remote clusters were not attending school because they had completed standard seven, O-level or A-level, the share for children living in accessible clusters was 29 percent. It is also noticeable that while 33 percent of children living in non-poor households were not attending school because they had gotten married, the share for those living in poor households is virtually null.

Furthermore, 35 percent of children from households where the main income earner belongs to the 'self-employed other' category do not attend school compared to only 3 percent of those from households where the main income earner belongs to the 'other' category. Further breakdown of data shows that while 76 percent of children from households where the main income earner is an employee were not attending because they were awaiting admission, the share for those from households belonging to the 'other' and 'self-employed other' categories is virtually null.

16 percent of children living in female-headed households do not attend school compared to 13 percent of those living in male-headed households. Further breakdown of data shows that while 39 percent of children from female-headed households were not attending because they had completed standard seven, O-level or A-level, the share for those from male-headed households is 30 percent. It is also observed that while 28 percent of children from female-headed households were not attending school due to marriage, the share for children from male-headed households was virtually null.

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	3.5	1.5	2.7	9.7	7.3	8.7
14	0.0	0.0	0.0	7.2	12.1	8.8
15	0.0	0.0	0.0	9.6	0.0	6.5
16	1.7	7.0	3.2	9.1	22.6	13.1
17	4.1	0.0	2.9	23.3	0.0	16.5
18	6.8	0.0	3.3	11.6	4.7	8.0
19	13.6	1.8	6.2	2.7	3.6	3.3

Source: CWIQ 2006 Ngorongoro DC

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

3 Education

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

	Male	Female	Total
Total	35.8	21.7	28.9
15-19 years	57.4	39.0	49.4
20-29 years	42.9	25.7	31.7
30-39 years	44.1	20.3	32.1
40-49 years	35.5	10.3	24.4
50-59 years	17.5	6.9	13.3
60+ years	8.4	0.0	6.2
Accessible	48.5	30.2	39.3
15-19 years	68.3	45.3	57.7
20-29 years	59.9	37.3	45.2
30-39 years	66.4	33.7	49.3
40-49 years	42.1	14.3	30.6
50-59 years	31.8	4.2	19.6
60+ years	6.1	0.0	4.2
Remote	24.7	13.5	19.4
15-19 years	46.7	31.3	40.5
20-29 years	27.4	15.3	19.5
30-39 years	26.9	8.4	17.8
40-49 years	28.0	6.8	18.0
50-59 years	2.3	11.1	5.3
60+ years	9.8	0.0	7.5

Source: CWIQ 2006 Ngorongoro DC

1. Base is population age 15+

Almost all primary school-aged children attend school, as their non-attendance rate is 1 percent. On the other hand, 61 percent of secondary school-aged individuals attend school. 35 percent of secondary school-aged individuals not attending secondary school reported having failed exams, while 66 percent of primary school-aged children not attending school were awaiting admission.

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 only 1 percent and therefore only enrolment rates will be analysed.

Overall, 53 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), 45 percent of girls and 60 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 27 percent of all seven year olds were enrolled. Children are most likely to be in school by the age of 11, where the NER is about 74 percent.

Secondary School

Table 3.5 shows secondary net enrolment patterns by age. Secondary school enrolment rates are much lower than those at primary level. Only 3 percent of secondary school-aged children was enrolled compared to 53 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 it is observed that the biggest difference in enrolment rates is observed between age 15 and 16. It is also noticeable that the rate of boys and girls enrolled in secondary school at the age of 14 is virtually null.

Secondary school drop-out rates among secondary school-age individuals (14 to 19 years) are higher compared to those of primary school. 9 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 (at 17 percent). The highest drop-out rate among males is at the age of 17, while female drop out rate is highest at age of 16.

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 were only asked for individuals aged 15 or older.

Adult Literacy

Overall, 29 percent of the population aged 15 and above in the district are literate. The difference in literacy rates among males and females is about 14 percentage points at 36 and 22 percent respectively. Individuals aged between 15 and 19 have the highest literacy rate (49 percent) while only 6 percent of those who are above 60 years know how to read and write. There are remarkable gender differences in literacy rates.

The literacy rate in accessible villages is 20 percentage points higher than in remote villages. The literacy rate for the 15-19 age-group in remote villages is 41 percent, whereas for accessible villages the rate is 58 percent. Furthermore, in accessible villages the literacy rate of men is 19 percentage points higher than that of women. In remote villages, the difference decreases to 11 percentage points. On the contrary, while the literacy rate of women in accessible villages is about 16 percentage points higher than that of women in remote villages, the difference in literacy rates between men in accessible and remote villages is 24 percentage points. Finally, there is a noticeable 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 is above 6 percent whereas, the share for women is virtually null.

Youth Literacy

Table 3.7 shows literacy rates among the youth by age, gender and cluster location. Youth literacy rate is calculated for all persons between 15 and 24 years old. The literacy rate for this group is 45 percent, but the gender difference is important. While the literacy rate for men is 56 percent, the rate for women is 20 percentage points lower, at 36 percent.

Analysis by age-groups shows that 15 to 17 year olds have the highest literacy rate at 54 percent. The 21-22 cohort has the highest literacy rate in accessible villages at 66 percent, whereas the 15-17 age-group has the highest literacy rate in remote villages, at 45 percent. However,

the youth literacy rate in accessible villages is higher than that of the youth in remote villages at 56 and 34 percent respectively.

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

	Male	Female	Total
Total	56.0	35.5	44.8
15-17 years	55.1	52.3	54.2
18-20 years	56.7	28.9	39.3
21-22 years	80.4	35.4	50.9
23-24 years	33.5	36.9	35.9
Accessible	69.5	44.5	55.5
15-17 years	63.2	60.1	62.0
18-20 years	78.1	31.0	48.4
21-22 years	100.0	48.9	65.6
23-24 years	45.8	53.7	51.2
Remote	42.7	25.4	33.6
15-17 years	47.3	37.5	45.1
18-20 years	36.8	26.9	30.6
21-22 years	62.8	21.0	36.2
23-24 years	17.2	18.5	18.1

Source: CWIQ 2006 Ngorongoro DC

1. Base is population aged 15-24

4 HEALTH

This chapter examines health indicators for the population in Ngorongoro 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 of 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 use is defined as the proportion of individuals who had consulted a healthcare provider in the 4 weeks preceding the survey regardless of their health status. Finally, the rate of satisfaction with health services is represented by the proportion of people who had consulted a health provider in the 4 weeks preceding the survey and cited no problems with the service received.

Table 4.1 shows indicators regarding medical services by cluster location, poverty status, socio-economic status, gender and age. Overall, 11 percent of the households have access to medical services. Conversely, 89 percent of the households in the district do not have access to medical services.

Regarding cluster location, household in accessible villages have higher rates of access to medical services at 20 percent

than households in remote villages at 2 percent. Both have similar rates of need but households in accessible villages reported higher use rate at 32 percent versus 24 percent reported by households in remote villages.

The breakdown by poverty status shows that non-poor households have higher shares of access at 18 percent compared to 7 percent reported by poor households. Poor households reported lower rates of use at 26 percent, 6 points lower than non-poor households.

The split-up by socio-economic status shows that the employees report the highest access rates at 70 percent,

Table 4.1 - Health Indicators

	Medical Services			
	Access	Need	Use	Satisfaction
Total	11.1	28.2	28.2	78.1
Cluster Location				
Accessible	20.1	28.1	32.0	79.2
Remote	2.4	28.3	24.6	76.8
Poverty Status				
Poor	6.8	26.7	26.2	78.6
Non-poor	18.4	30.9	31.6	77.4
Socio-economic group				
Employee	70.4	32.9	33.2	85.8
Self-employed - agriculture	8.5	28.3	28.2	78.4
Self-employed - other	19.8	26.6	28.3	82.0
Other	9.5	24.5	24.0	60.4
Gender				
Male	10.1	24.6	25.1	75.6
Female	12.1	32.1	31.5	80.3
Age				
0-4	10.9	47.4	64.5	78.8
5-9	10.8	23.9	21.0	78.0
10-14	10.3	16.6	14.9	76.2
15-19	11.4	18.7	16.0	79.7
20-29	12.4	25.3	21.5	76.8
30-39	13.3	24.9	20.0	74.3
40-49	14.4	21.3	14.4	76.8
50-59	0.0	22.4	22.4	0.0
60+	6.4	30.1	22.0	85.1

Source: CWIQ 2006 Ngorongoro 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.

4 Health

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	21.9	7.5	45.2	2.4	38.2	17.0	15.9	0.3
Cluster Location								
Accessible	20.8	3.1	59.2	0.8	35.9	19.2	7.2	0.0
Remote	23.2	12.4	29.6	4.2	40.7	14.6	25.5	0.6
Poverty Status								
Poor	21.4	9.2	48.0	1.7	35.8	17.9	15.8	0.5
Non-poor	22.6	5.2	41.4	3.3	41.4	15.8	15.9	0.0
Socio-economic group								
Employee	14.2	36.7	36.7	51.7	48.3	36.7	0.0	0.0
Self-employed - agriculture	21.6	6.9	46.5	1.1	35.6	17.8	17.0	0.3
Self-employed - other	18.0	0.0	29.3	0.0	84.7	0.0	0.0	0.0
Other	39.6	5.9	38.2	0.0	47.8	5.9	14.0	0.0
Gender								
Male	24.4	13.4	44.3	1.9	31.9	22.3	15.5	0.0
Female	19.7	1.1	46.1	2.9	44.9	11.3	16.3	0.6
Type of provider								
Public hospital	29.5	12.2	60.4	4.2	9.9	29.2	11.4	0.5
Private hospital	19.6	0.0	0.0	0.0	100.0	0.0	19.4	0.0
Religious hospital	39.1	2.0	29.5	0.0	80.2	0.0	16.6	0.0
Village health worker	64.9	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Private Doctor/Dentist	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pharmacist	1.1	0.0	0.0	0.0	100.0	100.0	0.0	0.0
Trad. Healer	3.6	0.0	0.0	0.0	18.2	0.0	100.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

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

followed by the self-employed in non-agricultural activities at 20 percent, while the lowest access rate was reported by the self-employed in agriculture. Employees also reported the highest need and use rates at 33 percent. The 'other' socio-economic group reported the lowest need and use rate (25 and 24 percent). Employees reported the highest satisfaction rate at 86 percent and the 'other' socio-economic group reported the lowest at 60 percent.

There are no differences in access reported by genders; however females reported higher use rates at 32 percent, 7 points higher than males.

Access does vary widely between the 0-49 ranging who reported rates ranging from 10 to 14 percent. While the 50- 59 reported no rates while the 60+ reported a rate of 6 percent. The highest need rate was reported by the under 5 at 47 percent while the lowest was reported by the 40-49 at 14 percent. The 50-59 age-group reported a satisfaction rate of 0 percent

while the highest satisfaction rate was reported by the 60+ at 85 percent.

4.2 Reasons for Dissatisfaction

Table 4.2 shows the percentage of population who consulted a healthcare 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 (45 percent), cost (38 percent), unsuccessful treatment (16 percent), drug unavailability (17 percent), and no trained professionals (2 percent).

The analysis by cluster location shows no difference in dissatisfaction rates but the reasons do. Households from accessible villages reported long waits as the lead reason for dissatisfaction at 59 percent followed by cost at 36 percent while households from remote villages reported cost as the lead reason for dissatisfaction at 41 percent followed by long waits at 30 percent. Unsuccessful treatment was

reported at 26 percent by households in remote villages compared to households in accessible villages at 7 percent. Drug unavailability was reported at 19 percent by households in accessible villages compared to 15 percent by households from remote villages.

The breakdown by poverty status shows no difference in the rates of dissatisfaction. Long wait was reported as the lead reason for dissatisfaction by poor households at 48 percent followed by cost at 36 percent. Non-poor households reported cost and long waits at 41 percent. Both poor and non-poor households reported unsuccessful treatment at around 16 percent. Similar shares of poor and non-poor households reported drug unavailability, at around 17 percent.

Regarding socio-economic status, the 'self-employed other' socio-economic group reported the highest dissatisfaction rate at 40 percent. Employees reported no trained professionals as the lead reason for

dissatisfaction at 52 percent followed by cost 48 percent and long wait and unclean facilities at 37 percent. The self-employed in agriculture reported long wait as the lead reason for dissatisfaction at 47 percent and cost at 37 percent. The self-employed in non-agricultural activities reported cost as the lead reason for dissatisfaction at 85 percent followed by long wait at 29 percent then by unsuccessful treatment and drug unavailability at an average of 17 percent. Cost was reported as the lead reason for dissatisfaction at 48 percent followed by long wait at 38 percent.

Dissatisfaction is reported 5 points higher by males at 24 percent than females. Cost and long waits were reported at similar rates by females. In turn, males reported a higher rate in long wait at 44 percent followed by cost at 32 percent. The latter group reported unclean facilities and drug unavailability more often than females.

Regarding type of health provider, village

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	71.8	92.5	1.6	6.0	0.1	0.6
Cluster Location						
Accessible	68.0	97.0	0.8	1.9	0.0	0.7
Remote	75.4	88.5	2.4	9.6	0.1	0.5
Poverty Status						
Poor	73.8	92.7	1.2	6.0	0.0	0.6
Non-poor	68.4	92.1	2.5	6.1	0.2	0.6
Socio-economic group						
Employee	66.8	100.0	0.0	0.0	0.0	0.0
Self-employed - agriculture	71.8	92.3	1.5	6.4	0.1	0.5
Self-employed - other	71.7	90.0	9.1	2.0	0.0	0.0
Other	76.0	91.4	0.0	5.3	0.0	3.2
Gender						
Male	74.9	93.7	1.5	4.5	0.1	1.0
Female	68.5	91.0	1.8	7.9	0.1	0.1
Type of sickness/injury						
Fever/malaria	11.8	0.0	14.0	94.0	0.0	0.0
Diarrhea/abdominal pains	18.5	0.0	17.4	92.5	0.0	0.0
Pain in back, limbs or joints	25.8	8.3	28.9	69.1	0.0	3.9
Coughing/breathing difficulty	13.2	3.2	41.0	71.8	0.0	0.0
Skin problems	25.3	0.0	31.6	66.3	0.0	20.8
Ear, nose, throat	0.0	0.0	0.0	0.0	0.0	0.0
Eye	25.9	29.7	53.1	70.3	0.0	0.0
Dental	0.0	0.0	0.0	0.0	0.0	0.0
Accident	28.0	0.0	0.0	100.0	0.0	0.0
Other	26.7	0.0	43.1	56.9	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

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

health care workers show a share of 65 percent followed by religious hospitals at 39 percent and public hospitals at 30 percent, private hospitals at 20 and finally traditional healers at 4 percent. Households reported being dissatisfied with public hospitals because of long wait (60 percent), drug unavailability at 30 percent, unclean facilities (12 percent) and unsuccessful treatment (11 percent). The reasons for dissatisfaction for private hospitals are cost at 100 percent and unsuccessful treatment by 20 percent. Dissatisfaction with religious hospitals was reported because of cost by 80 percent, long waits at 30 percent, and unsuccessful treatment at 17 percent. Dissatisfaction in village healthcare workers was reported at 100 percent because of long waits. Households reported being dissatisfied by pharmacists because of cost and drug unavailability at 100 percent. Unsuccessful treatment was reported at 100 percent by traditional healers and cost at 18 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, 72 percent of the population did not consult a health provider, typically because there was no need (93 percent of the cases).⁷ 7 percent of the people who did not consult a health provider had other reasons, mainly the distance to a healthcare provider and cost.

The breakdown by cluster location shows that households in accessible villages reported lower dissatisfaction rate at 68 percent compared to households in remote villages at 75 percent. In turn, poor households reported a higher dissatisfaction rate at 74 percent compared to non-poor households at 68 percent. There were no reported differences on the reasons for dissatisfaction by cluster location or poverty status.

Regarding socio-economic groups, the self-employed reported no need at 100 percent as the reason for not consulting a healthcare provider. The self-employed in non-agricultural activities reported cost as a reason for dissatisfaction at 9 percent

while the self-employed in agriculture reported distance at 6 percent. The 'other' socio-economic group reported distance at 5 percent. All categories reported no need at above 90 percent, as the main reason for not consulting.

The breakdown by gender shows that males reported 6 points higher of not consulting a healthcare provider than females.

The split-up by type of illness shows that for fever (including malaria) and diarrhoea the main reason for not consulting is distance (at 94 and 93 percent, respectively) this trend continues throughout other types of illnesses, and for accidents distance was reported at 100 percent. The second lead reason is cost for illnesses such as coughing and breathing difficulties (41 percent), pain in back, limbs or joints (29 percent) diarrhoea and abdominal pains (17 percent) and fever and malaria (14 percent).

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 almost 45 percent of the total population. In turn, coughing and breathing problems and diarrhoea and abdominal pain come in second and third place, with 28 and 16 percent of the ill population, respectively. Pain in the back limbs or joints affected 12 percent of the ill population, whereas other illnesses had minor shares.

The gender breakdown shows no differences in type of sickness. On the other hand, the age breakdown shows that the share of sick/injured population starts at around 47 percent for children under 5, decreases for the 5 to 9 cohort, stabilises around 23 percent, and then starts increasing again for the 30 to 49 cohort, peaking for the population aged 65 and over (26 percent for males, and 70 percent for females in that group). The share of ill population affected by malaria comes down with age but other problems emerge.

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	28.2	45.1	15.6	11.5	28.3	5.6	1.7	4.1	0.0	1.9	1.3
Male Total	24.6	47.3	14.4	10.0	25.9	6.4	1.2	4.6	0.0	2.7	1.4
0-4	44.5	56.3	19.8	1.6	22.1	7.9	2.7	4.0	0.0	1.4	0.0
5-9	23.9	49.2	16.2	4.5	25.3	9.0	1.6	1.0	0.0	0.0	0.0
10-14	18.2	58.9	11.0	2.3	15.0	7.2	0.0	0.0	0.0	11.0	7.1
15-29	17.0	47.2	15.4	7.2	31.8	2.6	0.0	0.0	0.0	5.2	0.0
30-49	18.3	33.6	4.5	29.2	39.3	3.2	0.0	6.3	0.0	3.5	2.6
50-64	20.5	35.2	7.6	30.2	24.7	10.5	0.0	10.5	0.0	0.0	6.9
65+	25.8	19.4	10.1	28.0	26.3	0.0	0.0	24.2	0.0	2.2	0.0
Female Total	32.1	43.4	16.6	12.8	30.2	4.9	2.2	3.6	0.0	1.2	1.2
0-4	50.2	54.9	16.1	4.4	18.7	9.8	5.1	4.4	0.0	3.7	0.4
5-9	23.8	55.6	3.5	0.0	39.5	6.1	1.2	0.0	0.0	0.0	0.0
10-14	14.2	61.1	3.8	7.3	34.8	3.5	0.0	0.0	0.0	0.0	0.0
15-29	27.6	37.1	21.2	13.0	35.6	1.7	0.7	0.0	0.0	0.0	2.6
30-49	30.1	20.0	28.9	26.2	33.0	2.1	0.9	3.9	0.0	0.0	1.1
50-64	34.0	31.8	7.6	31.3	28.5	0.0	0.0	18.6	0.0	0.0	5.5
65+	69.9	32.3	15.3	47.8	44.3	0.0	0.0	13.8	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro 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.

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	42.1	10.8	15.2	1.0	0.0	8.9	18.3	3.7	100.0
Cluster Location									
Accessible	41.5	15.0	18.2	1.6	0.0	9.9	11.4	2.5	100.0
Remote	42.8	5.6	11.5	0.2	0.0	7.7	26.9	5.3	100.0
Poverty Status									
Poor	36.9	11.5	15.1	1.4	0.0	10.0	20.3	5.0	100.0
Non-poor	49.3	9.8	15.5	0.4	0.0	7.4	15.6	1.9	100.0
Socio-economic group									
Employee	37.5	51.3	0.0	0.0	0.0	3.7	7.5	0.0	100.0
Self-employed - agric	42.5	8.6	15.7	1.1	0.0	8.7	19.4	4.0	100.0
Self-employed - other	28.1	12.7	29.0	0.0	0.0	20.3	8.0	1.8	100.0
Other	49.7	17.0	9.1	0.0	0.0	9.0	12.6	2.6	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is population who consulted a health provider

4.5 Health Provider

Traditional healers were consulted in 18 percent of the cases.

Table 4.5 shows the percent distribution of health consultations in the 4 weeks preceding the survey. Overall, 42 percent of the consultations were made in a public hospital, 9 percent to a pharmacist or chemist and 11 percent in private hospitals, 15 percent in a religious hospital and 1 percent to village health workers.

The breakdown by location shows that households reported similar rates of visiting public hospitals. However, households in accessible villages reported higher rates of visiting private hospitals at 15 percent compared to 6 percent reported by households in remote villages. Households from remote villages reported lower rates of visiting religious hospitals

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	17.5	25.1	29.0	22.4	16.5	20.5	79.5
Cluster Location								
Accessible	0.0	21.0	23.9	32.1	25.7	13.6	21.2	90.2
Remote	0.0	13.2	26.3	26.6	19.5	19.1	19.9	68.1
Poverty Status								
Poor	0.0	16.1	33.6	28.5	20.1	15.2	18.8	83.2
Non-poor	0.0	18.6	20.3	29.6	30.6	19.6	22.5	75.0
Socio-economic group								
Employee	0.0	18.2	28.3	63.6	10.6	50.0	25.2	62.9
Self-employed - agric	0.0	17.4	26.8	29.0	22.6	17.4	21.0	79.2
Self-employed - other	0.0	22.7	0.0	0.0	53.8	0.0	14.4	100.0
Other	0.0	0.0	0.0	41.9	16.6	0.0	12.4	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is females aged 12 or older.

at 18 percent compare to households in accessible villages at 18 percent. Accessible villages reported having visited traditional healers at a lower rate than households from remote villages (27 percent vs. 11 percent).

The breakdown by poverty status that shows poor households visit public hospitals at 37 percent, a lower rate than non-poor households at 49 percent. Poor households reported a higher rate of visiting traditional healers at 20 percent compared to non-poor households at 16 percent.

The breakdown by socio-economic group shows that the 'other' socio-economic group and the self-employed in agriculture reported the highest rate of visiting public hospitals at 50 percent and 43 percent. The employees reported the highest rate of visits to private hospitals at 51 percent. The highest rate of visits to religious hospitals was reported by the self-employed in non-agricultural activities at 29 percent. Only the self-employed in agriculture reported visiting a village health worker at 1 percent, and at the same time reported the highest rate of visits to traditional healers at 19 percent.

4.6 Child Deliveries

Table 4.6 shows the percentage of women aged 12 to 49 who had a live birth in the year preceding the survey. Overall, 21 percent of women in this age-group gave

birth in the past year. No women aged 14 or under gave in the district during the year preceding the survey. Around 18 percent of the females between 15 and 19 gave birth. The rate peaks at 29 percent for the 25-29 groups, and then decreases, reaching 17 percent for the group aged 40 to 49. In addition, 80 percent of pregnant women received prenatal care.

The breakdown by cluster location reveals that households in accessible villages show a higher rate for women giving birth between 25 and 29 years old at 32 percent compared to 27 percent reported by households in remote villages. Households from accessible villages reported a higher rate of births among the 15-19 cohort at 21 percent, 8 points higher than households in remote villages. Households in remote villages reported higher birth rates among the 40+ group at 21 percent, 6 points higher than their counterparts in accessible villages. In turn, accessible villages tend to report higher rates of birth in the younger cohorts. Note that 90 percent of women in accessible villages reported to have attended pre-natal healthcare compared to 68 percent of women in remote villages.

The analysis by poverty status reveals that 34 percent of women from poor households aged 20-24 had a live birth in the year preceding the survey, higher than the share for non-poor by 14 points. In turn, women from non-poor households reported higher rates of women giving birth in the 30-39 and 40+ cohorts.

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	5.5	0.0	0.9	0.0	93.0	0.7	100.0
Cluster Location							
Accessible	9.7	0.0	1.5	0.0	88.7	0.0	100.0
Remote	1.1	0.0	0.2	0.0	97.3	1.4	100.0
Poverty Status							
Poor	3.2	0.0	0.5	0.0	95.1	1.1	100.0
Non-poor	8.9	0.0	1.4	0.0	89.7	0.0	100.0
Socio-economic group							
Employee	62.4	0.0	0.0	0.0	37.6	0.0	100.0
Self-employed - agriculture	3.5	0.0	0.8	0.0	94.9	0.8	100.0
Self-employed - other	7.1	0.0	0.0	0.0	92.9	0.0	100.0
Other	0.0	0.0	4.3	0.0	95.7	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is children under 5 years old.

The breakdown by socio-economic status shows girls between 15-19 from the self-employed in non-agricultural activities reported the highest rate of births for this age-group at 23 percent. Women from the employee group reported the highest rate of birth in the 20-24 cohort at 28 percent and the 25-29 age-group at 64 percent. Women from the self-employed in non-agricultural activities reported the highest rate of births in the 30-39 age-group at 54 percent. The employees reported the highest rates for the 40+ age-group at 50 percent followed by women from the self-employed in agriculture at 17 percent. Women from the employee group reported the lowest attendance in pre-natal healthcare at 63 percent followed by the women from the self-employed in agriculture at 79 percent. The 'other' and the self-employed in non-agricultural activities reported 100 percent pre-natal care attendance.

Table 4.7 shows the percentage distribution of births in the five years preceding the survey. 6 percent of births in the 5 years preceding the survey took place in a hospital, 93 percent at home, and 1 percent at a dispensary. The ordering remains across cluster location, poverty status, and socio-economic group of the household head

Women from households in remote villages reported higher rates of births at home at 97 percent compared to 89 percent reported by women from households in accessible villages. Women from households in remote villages reported lower rates of births in hospitals

at 1 percent than their counterparts in accessible villages at 10 percent.

The breakdown by poverty status reveals that women from non-poor households reported higher rates of birth at 9 percent than women from poor households at 3 percent. Women from poor households reported higher rate of births taking place at home (95 percent) than women from non-poor households (90 percent).

The split-up by socio-economic group of the household shows that homes are the most common place for deliveries, leading rates reported by the self-employed and other socio-economic group at rates between 93 and 96 percent. Employees reported the highest rate of births in hospitals at 62 percent, followed by the self-employed in non-agricultural activities at 7 percent and the self-employed in agriculture at 4 percent. The highest rate of births at dispensary was reported by the 'other' socio-economic group at 4 percent.

Table 4.8 shows the percentage distribution of births in the five years preceding the survey by persons who assisted in the delivery of the child. Overall, 1 out of 10 deliveries was attended by a health professional. 71 percent of deliveries was reported to have taken place without assistance, 6 percent of deliveries was attended by midwives while, traditional birth assistants (TBA) and trained TBA accounted for 2 and 21 percent of the shares. Doctors or nurses attended less than 1 percent of the deliveries in the district.

The analysis by cluster location shows that deliveries without assistance were more common for women in remote villages than accessible villages (75 percent vs. 67 percent), whereas midwives were more common for women in accessible villages (11 percent vs. 1 percent). Overall 13 percent of births in households from accessible villages was attended by a health professional compares to a mere 3 percent for women from households in remote villages.

As expected, women from non-poor households show a higher share of deliveries attended by a professional 14 percent, against 4 percent for women in poor households. Conversely, women from poor households report a higher share of deliveries without assistance at 75 percent, 11 points higher than the rate reported by women from non-poor households. Women from non-poor households reported a higher share of deliveries attended by a midwife at 10 percent compared to 4 percent reported by women in poor households.

The breakdown by socio-economic group shows that employees reported the highest rates of births attended by health professionals at 62 percent, of which 49 percent was attended by midwives and 13 percent was attended by a doctor or nurse. Households in the 'self-employed in agriculture' category report the highest share of deliveries without assistance at 73 percent. The self-employed in non-agricultural activities reported the highest rate of deliveries attended by trained TBA at 43 percent. The self-employed in agriculture also reported 2 percent of

deliveries attended by a trained T.B.A.

4.9 Child Nutrition

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

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

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

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

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

	Doctor Nurse	Midwife	Trained T.B.A.	T.B.A.	Other Self	Don't know	Total	Delivery by health prof.
Total	0.4	6.3	1.5	20.9	70.8	0.0	100.0	8.3
Cluster Location								
Accessible	0.9	11.3	0.8	20.2	66.8	0.0	100.0	13.0
Remote	0.0	1.3	2.1	21.7	74.9	0.0	100.0	3.4
Poverty Status								
Poor	0.0	3.7	0.7	20.4	75.1	0.0	100.0	4.4
Non-poor	1.1	10.4	2.7	21.8	64.0	0.0	100.0	14.2
Socio-economic group								
Employee	13.4	49.1	0.0	0.0	37.6	0.0	100.0	62.4
Self-employed - agriculture	0.0	4.8	1.6	20.3	73.3	0.0	100.0	6.4
Self-employed - other	0.0	7.1	0.0	42.6	50.4	0.0	100.0	7.1
Other	0.0	4.3	0.0	38.7	57.0	0.0	100.0	4.3

Source: CWIQ 2006 Ngorongoro DC

1. Base is children under 5 years old.

Table 4.9: Nutritional status indicators and program participation rates

	Nutritional status indicators		Program participation		
	2SD)	2SD)	Nutrition	Weigh-in	Vaccinated
Total	38.5	2.7	33.4	85.0	66.5
Cluster Location					
Accessible	34.0	2.9	32.9	90.8	74.1
Remote	43.5	2.4	33.9	78.8	58.4
Poverty Status					
Poor	37.2	3.7	34.6	83.5	64.2
Non-poor	40.1	1.0	31.1	87.2	70.0
Socio-economic Group					
Employee	12.9	0.0	35.0	81.4	66.5
Self-employed - agriculture	39.9	3.0	33.3	84.8	64.9
Self-employed - other	55.1	0.0	48.9	92.9	89.2
Other	7.5	0.0	12.4	85.0	85.0
Gender and age in completed years					
Male	49.3	3.4	35.0	84.3	65.8
0	44.2	0.0	34.9	71.2	65.7
1	56.6	0.0	41.5	93.9	86.1
2	33.9	1.5	32.7	87.1	64.6
3	48.3	5.3	33.0	85.8	55.4
4	68.1	12.4	32.9	91.8	56.2
Female	27.8	1.9	31.8	85.6	67.3
0	15.4	0.0	28.9	70.1	66.6
1	36.6	1.3	29.5	91.4	73.4
2	27.5	4.2	42.8	90.7	75.0
3	18.3	2.8	24.4	86.7	54.6
4	44.2	0.0	29.6	96.1	53.8
Orphan status					
Orphaned	47.6	0.0	6.7	79.3	77.4
Not-orphaned	38.1	2.8	34.6	85.2	66.0
Foster status					
Fostered	20.4	26.9	35.8	57.1	22.7
Not-fostered	38.7	2.3	33.4	85.5	67.4

Source: CWIQ 2006 Ngorongoro DC

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

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

Another measurement commonly used is weight-for-age. A child who is below minus two standard deviations from the

median of the reference population is considered to be underweight. However, a child may be underweight because he/she is stunted, wasted or both. Interpretation of this indicator is complex and inconclusive; for this reason it was not incorporated into this report.

Overall, 3 percent of the children is wasted, and 39 percent is stunted. 33 percent of children participate in nutrition programs and 67 percent was reported to have been vaccinated.

Regarding cluster location; however children from households in remote villages reported higher rates of stunting (44 vs. 34 percent) than children from accessible villages. Children from remote villages reported higher vaccination rates

4 Health

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	59.0	83.5	83.6	80.3	76.7	35.6	83.3	79.1	75.3	60.4
Cluster Location										
Accessible	61.2	88.8	88.9	85.0	80.4	41.8	88.4	82.7	77.6	63.5
Remote	56.6	77.9	77.9	75.3	72.8	28.9	77.9	75.3	72.8	57.1
Poverty Status										
Poor	60.1	82.5	83.2	79.6	76.0	33.3	82.7	78.4	74.4	60.4
Non-poor	56.9	84.9	84.1	81.1	77.7	39.4	84.1	80.0	76.5	60.8
Socio-economic group										
Employed	37.6	74.0	81.4	77.5	77.5	62.4	81.4	73.4	58.6	59.3
Self-employed - agriculture	58.5	84.0	83.5	80.2	76.2	34.1	83.2	79.0	75.4	59.9
Self-employed - other	70.2	85.9	85.9	80.7	80.7	25.6	85.9	80.7	80.7	54.9
Other	85.0	75.2	85.0	85.0	85.0	62.8	85.0	85.0	85.0	85.0
Gender and age in completed years										
Male	63.3	82.6	83.0	80.0	77.0	35.5	82.4	78.9	74.9	62.0
0	17.8	67.0	64.4	55.9	45.1	31.5	62.3	52.7	40.4	16.1
1	82.5	90.7	93.9	93.9	93.9	36.2	93.9	92.2	92.2	82.9
2	69.5	84.7	84.7	84.7	84.7	40.9	84.7	84.7	84.7	67.7
3	84.3	89.3	89.3	89.3	89.3	34.4	89.3	89.3	87.1	78.6
4	90.4	90.4	94.5	90.4	90.4	36.9	94.5	90.4	90.4	94.5
Female	54.8	84.4	84.1	80.5	76.4	35.6	84.1	79.3	75.6	58.9
0	14.4	70.5	71.8	58.8	48.7	30.4	69.6	57.6	47.5	24.1
1	56.9	91.8	89.5	88.0	88.0	40.2	91.8	88.0	88.0	67.5
2	67.0	85.1	87.2	87.2	83.5	32.0	87.2	83.5	81.4	64.5
3	84.9	86.7	86.7	86.7	82.8	44.1	86.7	86.7	82.8	84.9
4	72.9	96.1	90.2	90.2	90.2	32.7	90.2	90.2	90.2	69.1

Source: CWIQ 2006 Ngorongoro DC

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

than children from households in accessible villages. 2 percent of children from remote villages was reported to have been wasted.

There were no strong differences in nutritional status of the children by poverty status. However, children from non-poor households reported higher vaccination rate at 70 percent, 6 points higher than children from poor households.

Regarding socio-economic status, households in the self-employed in non-agricultural activities reported the highest stunting rates at 55 percent, followed by children from the self-employed in agriculture at 4 percent. Children from the self-employed in non-agricultural activities reported the highest attendance to nutritional programs followed by the children from the employees group at 35 percent. Children from the self-employed in non-agricultural activities reported the highest vaccination rates at 89 percent

while children from the employees reported the lowest vaccination rate at 67 percent.

The gender breakdown shows boys report higher rates of stunting at 49 percent, while girls reported 28 percent. Girls and boys reported similar rates of vaccination at around 67 percent. Boys reported the highest stunting rate at age 4 at 12 percent, while girls reported the highest stunting rate at age 2.

The breakdown by orphan status shows orphaned children reported 0 percent of wasting compared to 3 percent reported by non-orphaned children. Orphaned children reported 47 percent stunting, 10 points higher than non-orphaned children. Non-orphaned children reported higher rates of attendance to nutritional programs at 35 percent compared to orphaned children at 7 percent. However, orphaned children reported higher rates of vaccination at 77 percent, 10 points higher than non-orphaned children.

Regarding fostered status, fostered children reported lower rates of stunted children at 20 percent compared to non-fostered children at 39 percent. Fostered children reported higher wasting rates at 27 percent compared to non-fostered children at 2 percent. Fostered children reported lower rates of attendance in nutritional programs at 57 percent compared to non-fostered children at 86 percent similarly fostered children reported lower rates of vaccination at 23 percent compared to 67 percent reported by children from non-fostered children.

Table 4.10 shows the percent distribution of children vaccinated by type of vaccination received. Overall, 59 percent of children under 5 have been vaccinated against measles, 83 percent against BCG, and roughly between 77 and 84 percent received vaccinations against DPT and between 36 and 83 against OPV. Finally, 60 percent of the children in the district receive vitamin A supplements.

Regarding cluster location, children from accessible villages reported higher measles vaccination rates at 61 percent compared to children from remote villages at 57 percent. The trend shows that children from accessible villages reported consistently higher vaccination rates across the types.

The breakdown by poverty status reveals that children from poor households reported consistently lower vaccination rates than children compared to their counterparts in non-poor households.

The analysis by socio-economic groups shows that vaccination against measles and vitamin supplements is highest for children from the 'other socio-economic activities at 85 percent respectively. Vaccination against BCG is highest for children from the self-employed in non-agricultural activities at 86 percent.

The gender breakdown shows that boys have higher rates of vaccination against measles at 63 percent compared to girls at 55 percent. Both genders reported the highest rates of vaccinations at the age of 4. In turn, the vaccination rates for children under 1 years of age are roughly 25 percent lower than the rest of the children.

Table 4.11 shows the percent distribution of children vaccinated by source of

information. Overall, the information for 96 percent of the vaccinated children was supported by a vaccination card.

The breakdown by cluster location and poverty status shows no difference. Regarding socio-economic status, the self-employed in agriculture and the employees' vaccination information was from other sources by 6 and 8 percent respectively. There were no strong differences by gender.

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

	Health Card	Other	Total
Total	95.6	4.4	100.0
Cluster Location			
Accessible	95.3	4.7	100.0
Remote	96.0	4.0	100.0
Poverty Status			
Poor	94.4	5.6	100.0
Non-poor	97.6	2.4	100.0
Socio-economic group			
Employed	91.7	8.3	100.0
Self-employed - agriculture	95.7	4.3	100.0
Self-employed - other	94.0	6.0	100.0
Other	100.0	0.0	100.0
Gender and age in completed years			
Male			
0	83.4	16.6	100.0
1	100.0	0.0	100.0
2	100.0	0.0	100.0
3	100.0	0.0	100.0
4	100.0	0.0	100.0
Female			
0	85.6	14.4	100.0
1	95.8	4.2	100.0
2	100.0	0.0	100.0
3	100.0	0.0	100.0
4	93.9	6.1	100.0

Source: CWIQ 2006 Ngorongoro DC

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

5 EMPLOYMENT

This chapter examines employment indicators for the population of Ngorongoro 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 84 percent of the adult population is employed and 15 percent underemployed. Unemployment is lower than 1 percent and the inactivity rate

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	83.8	14.7	98.5	0.0	1.5	1.5	100.0
Cluster Location							
Accessible	82.9	15.8	98.8	0.0	1.2	1.2	100.0
Remote	84.5	13.6	98.2	0.0	1.8	1.8	100.0
Poverty Status							
Poor	83.9	14.3	98.3	0.0	1.7	1.7	100.0
Non-poor	83.5	15.2	98.7	0.0	1.3	1.3	100.0
Gender and age							
Male	79.0	18.8	97.8	0.0	2.2	2.2	100.0
15-29	85.5	11.1	96.6	0.0	3.4	3.4	100.0
30-49	71.5	28.0	99.5	0.0	0.5	0.5	100.0
50-64	78.8	21.2	100.0	0.0	0.0	0.0	100.0
65+	79.2	14.5	93.7	0.0	6.3	6.3	100.0
Female	88.9	10.3	99.2	0.0	0.8	0.8	100.0
15-29	91.5	7.9	99.4	0.0	0.6	0.6	100.0
30-49	83.7	16.0	99.7	0.0	0.3	0.3	100.0
50-64	89.2	8.7	97.8	0.0	2.2	2.2	100.0
65+	94.9	0.0	94.9	0.0	5.1	5.1	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Underemployed includes persons who sought to increase earnings in the seven days preceding the survey.
2. Unemployed includes persons who did not work in the four week period preceding the survey and who looked for work in the same period. The inactive population, primarily students and retired persons, is not included in unemployment.

5 Employment

is 2 percent. This shows that underemployment is a bigger problem in the area than unemployment. There are no differences by cluster location or by poverty status. For both genders, underemployment peaks for the cohort aged between 30 and 49. Around 28 percent of the males in this group are

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	98.5	0.0	14.9	98.7	0.0	22.2
Cluster Location						
Accessible	98.8	0.0	16.0	98.6	0.0	29.7
Remote	98.2	0.0	13.9	98.8	0.0	15.8
Poverty Status						
Poor	98.3	0.0	14.6	98.3	0.0	23.9
Non-poor	98.7	0.0	15.4	99.1	0.0	20.6
Gender and age						
Male	97.8	0.0	19.2	98.5	0.0	23.6
15-29	96.6	0.0	11.5	98.8	0.0	18.2
30-49	99.5	0.0	28.1	99.5	0.0	28.7
50-64	100.0	0.0	21.2	100.0	0.0	22.1
65+	93.7	0.0	15.4	93.4	0.0	16.0
Female	99.2	0.0	10.4	100.0	0.0	13.1
15-29	99.4	0.0	7.9	100.0	0.0	13.8
30-49	99.7	0.0	16.1	100.0	0.0	22.1
50-64	97.8	0.0	8.9	100.0	0.0	9.5
65+	94.9	0.0	0.0	100.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro 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	Inactive	Total
	Employed	Under emp.	Working	Unemployed			
Total	89.6	8.5	98.1	0.0	98.1	1.9	100.0
Cluster Location							
Accessible	93.9	5.1	99.0	0.0	99.0	1.0	100.0
Remote	85.0	12.1	97.1	0.0	97.1	2.9	100.0
Poverty Status							
Poor	93.2	4.3	97.5	0.0	97.5	2.5	100.0
Non-poor	85.6	13.2	98.8	0.0	98.8	1.2	100.0
Gender and age							
Male	85.7	10.4	96.2	0.0	96.2	3.8	100.0
15-16	93.3	3.7	97.0	0.0	97.0	3.0	100.0
17-19	90.8	3.7	94.5	0.0	94.5	5.5	100.0
20-21	82.0	18.0	100.0	0.0	100.0	0.0	100.0
22-23	63.0	31.9	94.9	0.0	94.9	5.1	100.0
Female	92.8	6.9	99.7	0.0	99.7	0.3	100.0
15-16	100.0	0.0	100.0	0.0	100.0	0.0	100.0
17-19	94.6	4.5	99.0	0.0	99.0	1.0	100.0
20-21	90.4	9.6	100.0	0.0	100.0	0.0	100.0
22-23	89.8	10.2	100.0	0.0	100.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro 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.

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underemployed, whereas the share for females is 16 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 is higher for the population over 65, as would be expected, reaching 6 percent for males and 5 percent for females.

5.1.2 Employment of Household Heads

Table 5.2 shows the principal labour force indicators for the adult population compared to the household heads. Activity rates are similar for total population and household heads, but underemployment is higher among the latter. Although there are no differences by cluster location or poverty status for the general population, heads of households in accessible clusters report an unemployment rate almost twice as high as the rate reported by household heads from remote villages (30 and 16 percent, respectively). In turn, heads from poor households report a higher underemployment rate than non-poor households, but the difference is narrower (24 and 21 percent, respectively).

The gender breakdown shows that in the general population males are more likely to be underemployed than females, with rates of 19 and 10 percent, respectively. Similar differences are observed for household heads, with shares of 24 percent for males and 13 percent for females.

The breakdown by age-groups shows that underemployment rates for household heads shows the same trend as the general population, peaking in the 30-49 cohort for both genders.

Table 5.2

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 98 percent. However, underemployment is lower: only 9 percent is underemployed, as opposed to 15 percent for the overall population. Furthermore, the youth from poor

Table 5.4 - Percentage distribution of the working population by employment status

	Employee	Self-employed		Other	Total
		Agriculture	Other		
Total	2.5	40.5	2.1	54.9	100.0
Cluster Location					
Accessible	4.1	37.5	1.4	57.0	100.0
Remote	1.1	43.2	2.7	53.0	100.0
Poverty Status					
Poor	0.5	38.6	0.9	60.0	100.0
Non-poor	5.1	42.8	3.5	48.5	100.0
Gender and age					
Male	3.8	69.3	1.9	24.9	100.0
15-29	3.4	32.0	1.3	63.3	100.0
30-49	6.3	88.7	3.7	1.3	100.0
50-64	1.0	99.0	0.0	0.0	100.0
65+	1.7	90.6	1.8	5.9	100.0
Female	1.2	10.4	2.2	86.2	100.0
15-29	1.0	4.3	1.2	93.5	100.0
30-49	1.6	14.3	2.2	81.8	100.0
50-64	1.6	19.2	5.5	73.7	100.0
65+	0.0	39.2	8.7	52.1	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is working population aged 15+

Table 5.5 - Percentage distribution of the working population by employer

	State/NGO/			Total
	Other	Private	Household	
Total	0.6	44.6	54.8	100.0
Cluster Location				
Accessible	0.3	42.4	57.2	100.0
Remote	0.8	46.6	52.6	100.0
Poverty Status				
Poor	0.4	39.9	59.7	100.0
Non-poor	0.8	50.5	48.7	100.0
Gender and age				
Male	0.8	74.3	24.9	100.0
15-29	0.5	36.3	63.2	100.0
30-49	1.1	97.5	1.4	100.0
50-64	0.0	100.0	0.0	100.0
65+	1.8	92.3	5.9	100.0
Female	0.4	13.6	86.0	100.0
15-29	0.0	6.5	93.5	100.0
30-49	0.7	18.0	81.3	100.0
50-64	1.6	24.7	73.7	100.0
65+	0.0	47.9	52.1	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is working population aged 15+

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

A breakdown by gender shows that the underemployment rate among the male youth is higher than among the female youth, at 10 percent and 7 percent, respectively. It can be seen that

Table 5.6 - Percentage distribution of the working population by activity

	Agriculture	Mining/manuf/ energy/constr	Pub & priv services	Domestic duties	Other	Total
Total	79.5	0.0	4.2	16.1	0.2	100.0
Cluster Location						
Accessible	81.3	0.0	5.2	13.1	0.4	100.0
Remote	77.8	0.0	3.2	18.9	0.1	100.0
Poverty Status						
Poor	84.0	0.0	1.4	14.3	0.3	100.0
Non-poor	73.9	0.0	7.6	18.3	0.2	100.0
Gender and age						
Male	90.5	0.0	4.9	4.2	0.4	100.0
15-29	86.4	0.0	3.8	9.3	0.5	100.0
30-49	89.9	0.0	9.1	0.4	0.6	100.0
50-64	99.0	0.0	1.0	0.0	0.0	100.0
65+	93.4	0.0	1.8	4.8	0.0	100.0
Female	68.0	0.0	3.4	28.5	0.1	100.0
15-29	69.1	0.0	2.2	28.7	0.0	100.0
30-49	71.5	0.0	3.5	24.7	0.3	100.0
50-64	57.7	0.0	11.0	31.3	0.0	100.0
65+	48.1	0.0	0.0	51.9	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is working population aged 15+

underemployment is higher in the 22-23 group for both genders.

5.2 Working population

Table 5.4 shows that the vast majority of the working population is formed by self-employed in agriculture at 41 percent, or in other activities (inactive, unemployed, unpaid workers, domestic workers) at 55 percent. Moreover, employees only account for 3 percent of the working population. The population working as employees or in other activities is higher in accessible villages, while the share self-employed in agriculture is higher in remote villages.

The breakdown by poverty status shows that employees and self-employed in agriculture report higher shares in non-poor households, whereas the share in other activities is higher among poor households.

The gender breakdown shows that a higher share of males works as employees or is self-employed in agriculture, whereas females report a higher share in other activities. The cut down by age-groups shows that the share of employees peaks for males in the 30-49 cohort (6 percent), the self-employed in agriculture for 50-64 males (99 percent), the 'self-employed other' for 65+ females (9 percent) and 'other' for 15-29 females (94 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) employs around 45 percent of the working population, which combined with individuals who work for their own households represent up to 99 percent of the working population.

Households employ higher shares of workers in accessible villages and poor households; and the private sector employs higher shares of workers in remote villages and non-poor households.

Males report a higher share than females working for the private sector, while the latter report a higher share working for the household. The age-breakdown shows that the share of males working for the household is higher in the 15-29 cohort, around 63 percent, but that the remaining cohorts are mostly concentrated in the private sector. In the case of females, the share working for the private sector increases with age, but is always lower than the share of males. In turn the share of females working for the household decreases as age 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

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services); domestic duties; and other. Overall, agriculture and domestic duties together account for 86 percent of the working population. 80 percent of the population is engaged in agriculture, and 16 percent in domestic duties.

The split-up by remoteness of the village shows that accessible villages report a higher share in agriculture, while remote villages report a higher share in domestic duties. In turn, the breakdown by poverty status shows that poor households report a higher share working in agriculture, while non-poor households report higher shares working in services and domestic duties.

The gender breakdown shows that males report a higher share working in agriculture and a lower share working in domestic duties than females.

The breakdown by age-groups shows that the share working in services peaks at 9 percent for 30-49 males and at 11 percent for 50-64 females. While 9 percent of males in the 15-29 cohort and 5 percent of the 65+ cohort work in domestic duties, the shares for the remaining cohorts are practically null. In turn, the share of females working in domestic duties increases with age, from 29 percent for the 15-29 age-groups to 52 percent for the 65+ cohort. The share of males in agriculture increases with age, and the share of

women decreases with age, from 69 percent for the 15-29 cohort to 48 percent for the 65+ cohort.

Table 5.7 shows the percentage distribution of the working population by employment status, gender and activity. Overall, around 90 percent of the male labour force is in agriculture, whereas the share for females is 68 percent. Domestic duties have the second highest shares females, with a share of 29 percent.

Most employees are occupied in services (78 percent of males, 100 percent of females). This is also the case of the self-employed in non-agricultural activities, with 93 percent of males and 80 percent of females in this category dedicated to services. The population in the 'other' group is concentrated in agriculture and, in second place, to domestic duties.

The percentage distribution of the working population by employer, gender, and activity is shown in Table 5.8. The working population employed by the government is mostly dedicated to agriculture in the case of males and services in the case of females. The labour force working for private employers (whether formal or informal) is concentrated in agriculture for both genders. Individuals employed by the household mostly work in agriculture, but

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

	Employee		Self-employed		Self-employed		Other		Total	
	Male	Female	Agriculture		Other		Other		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	11.6	0.0	100.0	100.0	0.0	0.0	82.9	66.8	90.4	67.9
Mining & non-primary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Services	78.4	100.0	0.0	0.0	93.2	80.1	0.5	0.4	4.9	3.4
Domestic duties	0.0	0.0	0.0	0.0	6.8	15.2	16.6	32.8	4.4	28.6
Other	10.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.4	0.1

Source: CWIQ 2006 Ngorongoro DC

1. Base is working population aged 15+

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

	Government		Private		Household		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	76.8	0.0	93.2	75.3	84.9	67.2	90.8	68.0
Mining & non-primary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Services	23.2	100.0	6.0	21.2	0.0	0.4	4.8	3.5
Domestic duties	0.0	0.0	0.2	2.7	15.1	32.3	4.0	28.4
Other	0.0	0.0	0.6	0.9	0.0	0.0	0.4	0.1

Source: CWIQ 2006 Ngorongoro DC

1. Base is working population aged 15+

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

	Employee	Self-employed Agriculture	Self-employed Other	Other	Total
Total	0.0	68.6	3.6	27.8	100.0
Cluster Location					
Accessible	0.0	75.6	2.1	22.4	100.0
Remote	0.0	61.3	5.2	33.5	100.0
Poverty Status					
Poor	0.0	68.4	1.9	29.7	100.0
Non-poor	0.0	68.9	5.7	25.4	100.0
Gender and age					
Male	0.0	94.4	0.5	5.1	100.0
15-29	0.0	79.6	0.0	20.4	100.0
30-49	0.0	97.9	1.1	1.0	100.0
50-64	0.0	100.0	0.0	0.0	100.0
65+	0.0	100.0	0.0	0.0	100.0
Female	0.0	18.9	9.5	71.6	100.0
15-29	0.0	14.3	14.9	70.9	100.0
30-49	0.0	16.9	6.6	76.4	100.0
50-64	0.0	55.6	0.0	44.4	100.0
65+	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is underemployed population aged 15+

Table 5.10 - Percentage distribution of the underemployed population by employer

	State/NGO/Other	Private	Household	Total
Total	0.0	72.8	27.2	100.0
Cluster Location				
Accessible	0.0	77.6	22.4	100.0
Remote	0.0	67.7	32.3	100.0
Poverty Status				
Poor	0.0	71.4	28.6	100.0
Non-poor	0.0	74.6	25.4	100.0
Gender and age				
Male	0.0	94.9	5.1	100.0
15-29	0.0	79.6	20.4	100.0
30-49	0.0	99.0	1.0	100.0
50-64	0.0	100.0	0.0	100.0
65+	0.0	100.0	0.0	100.0
Female	0.0	30.1	69.9	100.0
15-29	0.0	29.1	70.9	100.0
30-49	0.0	26.9	73.1	100.0
50-64	0.0	55.6	44.4	100.0
65+	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is underemployed population aged 15+

15 percent of males and 32 percent of females in this group undertake domestic tasks.

5.3 Underemployed Population

The percentage distribution of the underemployed population by employment status is shown in Table 5.9. Overall, 69 percent of the underemployed population is self-employed in agriculture, 4 percent self-employed in other activities, and the remaining 28 percent is unemployed, unpaid or household workers ('other'). Even though the self-employed in agriculture represent 41 percent of the working population, they represent 69 percent of the underemployed population. Virtually no employees are underemployed.

The breakdown by cluster location shows that accessible villages report a higher share of underemployed population being self-employed in agriculture than remote villages. In turn, the latter report higher shares in 'self-employed other' and 'other' than the former.

The breakdown by poverty status shows that the share of underemployed population from poor households reporting to be in 'other' activities is higher than that of non-poor households. The self-employed in non-agricultural activities show a higher rate among underemployed population of non-poor households.

The gender breakdown shows that in the underemployed population, males are strongly concentrated in 'self-employed agriculture' while females are so in 'other'. For the underemployed females, the share of self-employment in agriculture increases with age until the 50-64 cohort. For males, the shares in self-employed agriculture increase with age, the former reporting higher shares, and only the 15-29 cohort has a substantial share in 'other' (20 percent), while the remaining cohorts report virtually null rates in this category.

Table 5.10 shows the percentage distribution of the underemployed population by employer. Overall, 73 percent of the underemployed population works for a private employer while the remaining 27 percent works for the household. While accessible villages and non-poor households report higher shares working for private employers, remote

villages and poor households report higher shares working for the household.

The gender breakdown reveals that the underemployed male population is vastly concentrated in private employers at 95 percent. The share for females is lower, 30 percent.

Underemployed females are mostly employed by the household at 70 percent, against 5 percent of underemployed males. The age-group analysis shows that the shares of underemployed population working for private employers increase with age for both genders.

The percentage distribution of the underemployed population by main economic activity is presented in Table 5.11. Overall, 94 percent of the underemployed workers are dedicated to agriculture.

The breakdown by poverty status or cluster location does not show important differences.

The gender breakdown shows that underemployed men have a higher share dedicated to agriculture than underemployed women, who have higher shares in services and domestic duties. No particular trends emerge when analysing by age-groups

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. The unemployment rate for the district was null.

Table 5.13 shows the main causes of economic inactivity. The causes are roughly equally distributed between being a student (37 percent), being too old (31 percent), and infirmity (32 percent). Being too old shows a higher rate in accessible clusters, whereas infirmity is more common in remote clusters. The breakdown by poverty status shows that being a student is more commonly cited in non-poor households, as well as infirmity. In turn, non-poor households report being too old more frequently than poor households.

Table 5.11 - Percentage distribution of the underemployed population by activity

	Agriculture	Mining/manuf/ energy/constr	private services	Domestic duties	Other	Total
Total	93.9	0.0	3.3	2.5	0.3	100.0
Cluster Location						
Accessible	96.2	0.0	2.1	1.7	0.0	100.0
Remote	91.4	0.0	4.5	3.4	0.7	100.0
Poverty Status						
Poor	95.0	0.0	1.2	3.1	0.6	100.0
Non-poor	92.5	0.0	5.7	1.8	0.0	100.0
Gender and age						
Male	99.5	0.0	0.5	0.0	0.0	100.0
15-29	100.0	0.0	0.0	0.0	0.0	100.0
30-49	98.9	0.0	1.1	0.0	0.0	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
Female	83.1	0.0	8.5	7.4	1.0	100.0
15-29	82.7	0.0	14.9	2.4	0.0	100.0
30-49	80.7	0.0	4.7	12.6	2.0	100.0
50-64	100.0	0.0	0.0	0.0	0.0	100.0
65+	0.0	0.0	0.0	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is underemployed population aged 15+

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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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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
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	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

Source: CWIQ 2006 Ngorongoro 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	0.0	37.0	0.0	31.2	0.0	31.8	0.0	0.0	100.0
Cluster Location										
Accessible	0.0	0.0	36.2	0.0	42.1	0.0	21.7	0.0	0.0	100.0
Remote	0.0	0.0	37.6	0.0	23.6	0.0	38.8	0.0	0.0	100.0
Poverty Status										
Poor	0.0	0.0	33.2	0.0	40.3	0.0	26.4	0.0	0.0	100.0
Non-poor	0.0	0.0	42.9	0.0	17.1	0.0	40.0	0.0	0.0	100.0
Gender and age										
Male	0.0	0.0	46.5	0.0	38.4	0.0	15.2	0.0	0.0	100.0
15-29	0.0	0.0	86.0	0.0	0.0	0.0	14.0	0.0	0.0	100.0
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	100.0	0.0	0.0	0.0	0.0	100.0
Female	0.0	0.0	12.4	0.0	12.4	0.0	75.3	0.0	0.0	100.0
15-29	0.0	0.0	32.8	0.0	0.0	0.0	67.2	0.0	0.0	100.0
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	100.0	0.0	0.0	100.0
65+	0.0	0.0	0.0	0.0	49.4	0.0	50.6	0.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is inactive population aged 15+

The breakdown by age-groups shows that infirmity occurs across the whole inactive population, but the share of females reporting infirmity is higher than that for males (75 percent of females, 15 percent

of males). 47 percent of economically inactive males reported being a student, and 38 percent reported being too old, whereas the figures females were 12 percent in each case.

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	51.6	48.9	12.2	50.4	80.3	97.7
Cluster Location						
Accessible	53.1	48.9	7.8	52.5	81.7	98.0
Remote	50.2	48.9	16.4	48.4	79.0	97.5
Poverty Status						
Poor	48.8	47.9	8.2	46.9	85.3	98.0
Non-poor	55.0	50.1	17.4	54.8	73.9	97.4
Gender and age						
Male	10.5	7.7	7.4	7.2	73.5	97.5
15-29	17.4	11.3	6.2	9.5	58.8	96.2
30-49	10.7	8.9	8.6	10.0	80.7	97.8
50-64	1.2	1.3	11.6	0.6	95.1	100.0
65+	1.3	1.3	2.4	1.3	71.0	97.4
Female	95.0	92.5	17.4	96.0	87.5	98.0
15-29	98.9	95.8	21.9	95.5	84.9	99.0
30-49	96.7	93.9	16.0	99.3	99.7	99.7
50-64	85.3	81.5	4.1	90.2	75.2	93.9
65+	53.0	63.1	0.0	90.0	52.8	80.7

Source: CWIQ 2006 Ngorongoro DC

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

	Fetching water	Fetching firewood	Cleaning toilet	Cooking	Care of children	Care or elderly/sick
Total	39.3	29.2	4.7	18.2	65.4	83.6
Cluster Location						
Accessible	46.0	27.8	1.8	20.9	68.1	81.9
Remote	32.6	30.6	7.6	15.5	62.6	85.4
Poverty Status						
Poor	40.3	31.6	3.6	19.1	64.4	83.9
Non-poor	35.9	20.6	8.6	14.9	69.0	82.3
Gender and age						
Male	22.6	8.5	2.9	2.7	59.0	83.2
5-9	17.7	10.2	2.6	1.1	54.4	80.3
10-14	28.5	6.4	3.2	4.7	64.5	86.6
Female	60.0	54.9	6.8	37.4	73.3	84.1
5-9	48.7	43.9	6.0	26.2	71.2	77.7
10-14	77.2	71.6	8.1	54.4	76.4	93.8
Orphan status						
Orphaned	44.0	21.1	6.8	19.4	71.8	76.5
Not-orphaned	38.8	30.1	4.4	18.1	64.7	84.4
Foster status						
Fostered	47.5	47.2	0.0	0.0	52.8	77.2
Not-fostered	39.3	29.0	4.8	18.5	65.7	83.6

Source: CWIQ 2006 Ngorongoro 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. Most the activities are undertaken by around 50 percent or more of the members. The only exception is cleaning the toilet, but as will be seen in section 7 (table 7.6) only 18 percent of households has some sort of latrine.

Accessible villages show higher shares of population fetching water and cooking,

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and at the same time a lower share of the population cleaning the toilets than in remote villages. In turn, non-poor households report higher shares fetching water, cleaning the toilet, and cooking than poor households, who report a higher share taking care of children.

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 88 and 99 percent, excepting cleaning the toilet at 17 percent. The shares for males fluctuate between 7 and 11 percent, except for taking care of children (74 percent) and of the sick and elderly (98 percent).

The analysis of age-groups shows that for both genders the shares tend to decrease with age in all activities.

5.6 Child Labour

Table 5.15 shows that the most common activities for children between 5 and 14 years old are taking care of children and of the elderly or sick. Children from accessible villages report higher shares fetching water, cooking and taking care of children than children from remote villages. The latter report higher shares cleaning the toilet and taking care of the elderly or sick.

The breakdown by poverty status shows that children from poor households report higher shares fetching water or firewood and cooking, whereas non-poor children report higher shares cleaning the toilet and taking care of children.

The gender breakdown shows that girls report higher rates than boys for all the household activities. The analysis by age-groups shows that for most household tasks the 10-14 cohorts have higher rates than the youngest children.

The breakdown by orphan status shows that orphaned children are more likely to help fetching water or taking care of children, while non-orphaned children are more likely to fetch firewood and take care of the elderly and sick. The breakdown by foster status shows that fostered children are more likely to fetch water or firewood, while non-fostered children have higher shares performing the remaining activities.

The main descriptive statistics for child labour are presented in Table 5.16. The most important result of the table is that 49 percent of the children are economically active. Their main economic activity is household duties at 56 percent, while the remaining 44 percent is dedicated to agriculture. The share of working children is higher in poor households. The particular activity does

Table 5.16- Child labour (age 5 to 14)

	Working	Main activity			Employer	
		Agriculture	Household	Other	Private	Household
Total	48.6	44.2	55.8	0.0	0.4	99.6
Cluster Location						
Accessible	49.3	42.7	57.3	0.0	0.7	99.3
Remote	47.9	45.8	54.2	0.0	0.0	100.0
Poverty Status						
Poor	54.0	48.5	51.5	0.0	0.5	99.5
Non-poor	35.7	28.9	71.1	0.0	0.0	100.0
Gender and age						
Male	51.0	51.2	48.8	0.0	0.0	100.0
5-9	37.1	50.6	49.4	0.0	0.0	100.0
10-14	94.5	51.9	48.1	0.0	0.0	100.0
Female	46.0	35.8	64.2	0.0	0.8	99.2
5-9	34.2	27.4	72.6	0.0	0.0	100.0
10-14	97.0	48.4	51.6	0.0	2.1	97.9
Orphan status						
Orphaned	68.2	43.9	56.1	0.0	0.0	100.0
Not-orphaned	47.1	44.3	55.7	0.0	0.4	99.6
Foster status						
Fostered	36.9	70.1	29.9	0.0	0.0	100.0
Not-fostered	48.7	43.9	56.1	0.0	0.4	99.6

Source: CWIQ 2006 Ngorongoro DC

not show evident correlation with remoteness, or gender. However, the breakdown by poverty status shows that the share working in household duties is higher in non-poor households, while the share working in agriculture is higher among poor households.

The main difference is given by the age breakdown. Roughly one third of children in the 5-9 cohort were part of the working population, whereas virtually all the children in the 10-14 cohort were working at the time of the survey. Virtually all the children work in the household, with counted exceptions working for a private employer.

Orphaned children are more likely to be working than non-orphaned children, at rates of 68 and 47 percent, respectively. In turn, non-fostered children are more likely to be working than fostered children, at 49 and 37 percent, respectively. The particular activity does not seem to be correlated with orphan status, but fostered children are more likely to work in agriculture whereas non-fostered children are more likely to do household activities.

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6 PERCEPTIONS ON WELFARE AND CHANGES WITHIN COMMUNITIES

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

6.1 Economic Situation

The analysis of this section is based solely on the perception of the interviewees. The main respondent for this part of the questionnaire was the household head. In cases where the household head was not able to respond i.e. was travelling, sick or had little information on the household's daily practices, then the best-informed household member responded. The respondents were asked to comment on whether the situation had changed for 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 24 percent of all households in the district reported a positive change in the economic situation of their community. 27 percent of the population reported observing no changes in their community's economic situation. Even though almost half the respondents

(47 percent) reported the community's economic condition to have deteriorated, only 17 percent reported the situation to be

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	16.5	30.3	26.6	23.0	1.3	2.3	100.0
Cluster Location							
Accessible	6.9	29.1	28.8	29.9	1.7	3.5	100.0
Remote	24.6	31.2	24.7	17.2	1.0	1.3	100.0
Poverty Status							
Poor	19.2	30.2	26.9	20.7	0.2	2.8	100.0
Non-poor	13.9	30.5	26.0	25.4	2.4	1.8	100.0
Household size							
1-2	15.5	21.9	33.7	25.5	0.7	2.8	100.0
3-4	14.0	34.6	22.8	21.6	3.1	4.0	100.0
5-6	20.3	24.8	27.2	27.3	0.0	0.3	100.0
7+	16.1	35.3	28.3	17.9	0.6	1.9	100.0
Area of land owned by the household							
None	24.9	28.0	29.4	12.1	0.6	5.1	100.0
< 1 ha	17.3	27.3	28.3	27.1	0.0	0.0	100.0
1-1.99 ha	16.8	29.6	35.6	16.4	0.7	0.8	100.0
2-3.99 ha	7.3	33.7	17.4	36.6	2.9	2.2	100.0
4-5.99 ha	6.2	33.4	10.9	45.2	4.2	0.0	100.0
6+ ha	5.5	38.7	19.2	34.0	2.6	0.0	100.0
Type of livestock owned by the household							
None	5.3	21.2	29.6	32.5	5.8	5.5	100.0
Small only	14.6	11.2	26.5	43.1	0.0	4.5	100.0
Large only	11.7	38.2	18.0	23.2	0.0	8.9	100.0
Both	17.7	31.6	26.7	21.2	1.1	1.6	100.0
Socio-economic Group							
Employee	6.2	10.1	18.1	52.3	8.8	4.4	100.0
Self-employed - agriculture	16.8	31.3	25.8	22.8	1.1	2.2	100.0
Self-employed - other	12.5	40.1	38.6	8.8	0.0	0.0	100.0
Other	24.1	23.4	40.3	9.4	0.0	2.9	100.0
Gender of the head of household							
Male	17.3	29.7	27.3	22.3	1.5	1.9	100.0
Female	11.2	34.3	21.9	27.8	0.0	4.8	100.0
Marital status of the head of household							
Single	10.3	15.0	51.9	12.7	0.0	10.1	100.0
Monogamous	12.9	27.5	24.0	32.2	1.5	1.9	100.0
Polygamous	20.1	30.8	26.4	19.5	1.6	1.6	100.0
Loose union	0.0	100.0	0.0	0.0	0.0	0.0	100.0
Widow/div/sep	12.6	40.2	25.9	17.6	0.0	3.7	100.0
Education level of the head of household							
None	19.6	31.5	26.2	19.8	0.9	2.0	100.0
Primary	9.1	26.8	30.0	30.7	1.1	2.3	100.0
	7.0	30.2	11.9	33.6	10.0	7.3	100.0

Source: CWIQ 2006 Ngorongoro DC

6 Perceptions on welfare and changes within communities

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	21.8	39.3	15.2	22.4	1.3	0.0	100.0
Cluster Location							
Accessible	10.4	42.6	15.4	28.9	2.8	0.0	100.0
Remote	31.5	36.5	15.0	17.0	0.0	0.0	100.0
Poverty Status							
Poor	21.2	45.6	12.9	19.7	0.6	0.0	100.0
Non-poor	22.5	33.3	17.4	24.9	1.9	0.0	100.0
Household size							
1-2	26.0	30.7	20.3	18.8	4.3	0.0	100.0
3-4	26.6	36.2	16.1	19.9	1.2	0.0	100.0
5-6	18.1	39.6	12.6	29.7	0.0	0.0	100.0
7+	16.2	49.6	14.2	18.5	1.5	0.0	100.0
Area of land owned by the household							
None	33.5	35.5	18.7	11.1	1.2	0.0	100.0
< 1 ha	22.2	38.4	20.1	19.3	0.0	0.0	100.0
1-1.99 ha	23.6	42.2	13.3	20.0	0.9	0.0	100.0
2-3.99 ha	5.7	44.8	11.7	35.3	2.4	0.0	100.0
4-5.99 ha	11.4	37.3	10.7	39.3	1.3	0.0	100.0
6+ ha	8.0	36.5	6.6	46.3	2.6	0.0	100.0
Type of livestock owned by the household							
None	16.6	12.1	23.2	42.4	5.8	0.0	100.0
Small only	17.3	41.2	21.3	20.2	0.0	0.0	100.0
Large only	13.1	46.5	31.9	8.5	0.0	0.0	100.0
Both	22.8	41.2	13.5	21.5	1.0	0.0	100.0
Socio-economic Group							
Employee	6.2	18.3	8.8	53.5	13.3	0.0	100.0
Self-employed - agriculture	22.8	39.2	15.9	21.3	0.8	0.0	100.0
Self-employed - other	15.8	59.3	2.9	22.0	0.0	0.0	100.0
Other	22.5	47.5	17.1	12.9	0.0	0.0	100.0
Gender of the head of household							
Male	22.5	39.1	14.1	23.0	1.2	0.0	100.0
Female	16.9	40.9	21.9	18.7	1.6	0.0	100.0
Marital status of the head of household							
Single	10.3	8.1	51.9	21.9	7.8	0.0	100.0
Monogamous	21.2	32.8	13.1	31.0	1.9	0.0	100.0
Polygamous	23.5	43.7	11.9	20.2	0.7	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Widow/div/sep	19.1	48.6	23.2	9.1	0.0	0.0	100.0
Education level of the head of household							
None	24.1	45.5	14.6	15.5	0.3	0.0	100.0
Primary	16.7	26.6	14.9	39.2	2.5	0.0	100.0
Secondary +	13.8	10.1	25.4	40.6	10.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

much worse.

Cluster location and poverty status of the household show some correlation with the perceived economic change. 56 percent of the households in remote clusters reported deterioration in their community's economic situation compared to 36 percent of those living in accessible clusters. Likewise, while 49 percent of

poor households reported deterioration in their community's economic situation, the share for non-poor households is 45 percent.

The percentage of households with seven or more members who reported deterioration in their community's economic situation is higher than that of households with one or two members at 51

and 38 percent respectively. In contrast, while 27 percent of households with one or two members reported an improvement in their community's economic situation, the share for households with seven or more members is 19 percent. Furthermore, there is a difference of 8 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 53 and 45 percent respectively. Likewise, the percentage of households owning large livestock and those owning both large and small livestock who reported worsening conditions in their community's economic situation is remarkably higher than that of households owning small or no livestock at 50 and 26 percent respectively.

While 53 percent of households belonging to the 'self-employed other' category reported deterioration in their community's economic situation, the share for households whose main income earner belongs to the 'employee' category is 16 percent. In contrast, while 61 percent of households where the main income earner belongs to the 'employee' category reported an improvement in their community's economic situation, the share for households belonging to the 'other' and 'self-employed other' categories is 9 percent. Furthermore, virtually all households where the household head has a loose union reported deterioration in their community's economic situation compared to 25 percent of households where the household head is single. In contrast, while 34 percent of households where the head is monogamous reported an improvement in their community's economic situation, the share for households where the head has a loose union is virtually null.

It is also observed that the percentage of households where the head has no education and reported much worse conditions in their community's economic situation is 13 percentage points higher than that of households where the head has secondary education or more, at 20 and 7 percent respectively. Lastly, while 28 percent of female-headed households reported an improvement in their community's economic situation, the share for male-headed households is 24 percent.

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

	Never	Seldom	Often	Always	Total
Total	12.4	20.2	51.9	15.5	100.0
Cluster Location					
Accessible	20.1	26.7	44.0	9.2	100.0
Remote	6.0	14.7	58.5	20.8	100.0
Poverty Status					
Poor	7.1	20.3	55.4	17.2	100.0
Non-poor	17.7	20.2	48.2	13.8	100.0
Household size					
1-2	19.1	16.7	56.7	7.5	100.0
3-4	12.5	18.7	51.1	17.7	100.0
5-6	8.0	19.6	56.8	15.7	100.0
7+	15.1	25.9	43.2	15.8	100.0
Area of land owned by the household					
None	8.8	10.5	60.5	20.1	100.0
< 1 ha	14.3	7.3	50.2	28.2	100.0
1-1.99 ha	5.5	23.8	57.6	13.0	100.0
2-3.99 ha	17.0	33.8	42.3	7.0	100.0
4-5.99 ha	28.9	23.8	41.9	5.4	100.0
6+ ha	22.6	48.2	19.2	10.1	100.0
Type of livestock owned by the household					
None	42.1	17.5	28.8	11.6	100.0
Small only	11.5	24.4	47.2	16.9	100.0
Large only	10.8	26.0	50.0	13.2	100.0
Both	10.1	20.0	54.1	15.8	100.0
Socio-economic Group					
Employee	57.4	20.0	22.6	0.0	100.0
Self-employed - agriculture	10.6	21.2	50.8	17.3	100.0
Self-employed - other	10.4	13.2	73.1	3.3	100.0
Other	2.3	6.8	84.8	6.2	100.0
Gender of the head of household					
Male	12.1	21.0	51.8	15.1	100.0
Female	15.0	14.9	52.1	18.0	100.0
Marital status of the head of household					
Single	20.7	16.5	49.4	13.4	100.0
Monogamous	15.9	23.8	48.5	11.8	100.0
Polygamous	9.1	19.8	54.0	17.0	100.0
Loose union	0.0	0.0	100.0	0.0	100.0
Widow/div/sep	15.2	13.7	51.9	19.2	100.0
Education level of the head of household					
None	8.7	17.6	55.3	18.4	100.0
Primary	16.3	26.9	47.2	9.7	100.0
Secondary +	53.9	25.4	20.6	0.0	100.0

Source: CWIQ 2006 Ngorongoro 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. Around one quarter (23

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percent) of the households reported an improvement in their economic conditions, whereas 15 percent reported same conditions compared to the year preceding the survey.

While 32 percent of people living in accessible clusters reported an improvement in the economic conditions of their households, the share for remote clusters is virtually null.

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

	Never	Seldom	Often	Always	Total
Total	98.6	1.2	0.2	0.0	100.0
Cluster Location					
Accessible	98.0	1.6	0.5	0.0	100.0
Remote	99.1	0.9	0.0	0.0	100.0
Poverty Status					
Poor	98.4	1.6	0.0	0.0	100.0
Non-poor	98.8	0.8	0.4	0.0	100.0
Household size					
1-2	100.0	0.0	0.0	0.0	100.0
3-4	99.5	0.5	0.0	0.0	100.0
5-6	99.7	0.3	0.0	0.0	100.0
7+	94.5	4.5	1.0	0.0	100.0
Area of land owned by the household					
None	98.5	0.9	0.6	0.0	100.0
< 1 ha	98.5	1.5	0.0	0.0	100.0
1-1.99 ha	100.0	0.0	0.0	0.0	100.0
2-3.99 ha	96.6	3.4	0.0	0.0	100.0
4-5.99 ha	100.0	0.0	0.0	0.0	100.0
6+ ha	97.4	2.6	0.0	0.0	100.0
Type of livestock owned by the household					
None	95.4	1.7	2.9	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	98.7	1.3	0.0	0.0	100.0
Socio-economic Group					
Employee	93.1	2.5	4.4	0.0	100.0
Self-employed - agriculture	98.7	1.3	0.0	0.0	100.0
Self-employed - other	100.0	0.0	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	98.9	0.9	0.2	0.0	100.0
Female	96.7	3.3	0.0	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	98.1	1.3	0.6	0.0	100.0
Polygamous	98.5	1.5	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	100.0	0.0	0.0	0.0	100.0
Education level of the head of household					
None	98.6	1.4	0.0	0.0	100.0
Primary	99.2	0.0	0.8	0.0	100.0
Secondary +	94.9	5.1	0.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

Likewise, Non-poor households express positive views on the change in their economic condition more frequently than poor households, with a difference of 26 percentage points.

The percentage of households with one or two members who reported much worse conditions in the economic situation of their households is higher than that of households with seven or more members at 26 and 16 percent respectively. On the other hand, 70 percent of households owning no land reported deterioration in the economic conditions of their households, while the share for households owning six or more hectares of land is 45 percent. Disaggregation of the data further shows that 64 percent of households owning both large and small livestock express negative views on their households' economic conditions compared to 29 percent of households owning no livestock.

The percentage of households in the 'other' and 'self-employed agriculture' categories who reported much worse conditions in their households' economic situation is remarkably higher than that of households whose main income earner belongs to the 'employee' category at 23 and 6 percent respectively. Likewise, virtually all households where the head has a loose union reported much worse conditions in their household's economic situation, the share for households where the head is single is 10 percent.

23 percent of male-headed households reported much worse conditions in their economic situation compared to 17 percent of female-headed households. Likewise, 24 percent of households where the head has no formal education reported much worse conditions in their households' economic situation compared to 14 percent of households where the head has secondary education or more.

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, 32 percent of the district's households never/seldom experienced food shortages while the remaining population experienced food shortages frequently (often/always). While 80 percent of households in remote clusters experienced food shortages frequently, the share for households in accessible clusters is 53 percent. Likewise, 72 percent of poor households experienced food shortages frequently compared to 62 percent of non-poor households.

71 percent of households owning six or more hectares of land never/seldom experienced problems satisfying food needs compared to 20 percent of landless households. Furthermore, while 41 percent of households with seven or more members never/seldom experienced food shortages, the share for households with one or two members is 36 percent. There is also some correlation between livestock ownership and satisfying food needs. While 42 percent of households owning no livestock never experienced food shortages, the share for households owning small livestock and those owning large livestock is 11 percent.

The socio-economic group of the household also shows some correlation with the household's ability to satisfy its food needs. 85 percent of households belonging to the 'other' socio-economic group reported frequent problems satisfying food needs compared to 23 percent of households where the main income earner is an employee. In contrast, 57 percent of households belonging to the 'employee' category never experienced food shortages. Furthermore, while 21 percent of households where the head is single had never experienced food

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	100.0	0.0	0.0	0.0	100.0
Cluster Location					
Accessible	100.0	0.0	0.0	0.0	100.0
Remote	100.0	0.0	0.0	0.0	100.0
Poverty Status					
Poor	100.0	0.0	0.0	0.0	100.0
Non-poor	100.0	0.0	0.0	0.0	100.0
Household size					
1-2	100.0	0.0	0.0	0.0	100.0
3-4	100.0	0.0	0.0	0.0	100.0
5-6	100.0	0.0	0.0	0.0	100.0
7+	100.0	0.0	0.0	0.0	100.0
Area of land owned by the household					
None	100.0	0.0	0.0	0.0	100.0
< 1 ha	100.0	0.0	0.0	0.0	100.0
1-1.99 ha	100.0	0.0	0.0	0.0	100.0
2-3.99 ha	100.0	0.0	0.0	0.0	100.0
4-5.99 ha	100.0	0.0	0.0	0.0	100.0
6+ ha	100.0	0.0	0.0	0.0	100.0
Type of livestock owned by the household					
None	100.0	0.0	0.0	0.0	100.0
Small only	100.0	0.0	0.0	0.0	100.0
Large only	100.0	0.0	0.0	0.0	100.0
Both	100.0	0.0	0.0	0.0	100.0
Socio-economic Group					
Employee	100.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	100.0	0.0	0.0	0.0	100.0
Self-employed - other	100.0	0.0	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	100.0	0.0	0.0	0.0	100.0
Female	100.0	0.0	0.0	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	100.0	0.0	0.0	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	100.0	0.0	0.0	0.0	100.0
Education level of the head of household					
None	100.0	0.0	0.0	0.0	100.0
Primary	100.0	0.0	0.0	0.0	100.0
Secondary +	100.0	0.0	0.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

shortages, the share for households where the head has a loose union is virtually null. On the other hand, virtually all households where the head has a loose union often experienced food shortages.

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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	100.0	0.0	0.0	0.0	100.0
Cluster Location					
Accessible	100.0	0.0	0.0	0.0	100.0
Remote	100.0	0.0	0.0	0.0	100.0
Poverty Status					
Poor	100.0	0.0	0.0	0.0	100.0
Non-poor	100.0	0.0	0.0	0.0	100.0
Household size					
1-2	100.0	0.0	0.0	0.0	100.0
3-4	100.0	0.0	0.0	0.0	100.0
5-6	100.0	0.0	0.0	0.0	100.0
7+	100.0	0.0	0.0	0.0	100.0
Area of land owned by the household					
None	100.0	0.0	0.0	0.0	100.0
< 1 ha	100.0	0.0	0.0	0.0	100.0
1-1.99 ha	100.0	0.0	0.0	0.0	100.0
2-3.99 ha	100.0	0.0	0.0	0.0	100.0
4-5.99 ha	100.0	0.0	0.0	0.0	100.0
6+ ha	100.0	0.0	0.0	0.0	100.0
Type of livestock owned by the household					
None	100.0	0.0	0.0	0.0	100.0
Small only	100.0	0.0	0.0	0.0	100.0
Large only	100.0	0.0	0.0	0.0	100.0
Both	100.0	0.0	0.0	0.0	100.0
Socio-economic Group					
Employee	100.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	100.0	0.0	0.0	0.0	100.0
Self-employed - other	100.0	0.0	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	100.0	0.0	0.0	0.0	100.0
Female	100.0	0.0	0.0	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	100.0	0.0	0.0	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	100.0	0.0	0.0	0.0	100.0
Education level of the head of household					
None	100.0	0.0	0.0	0.0	100.0
Primary	100.0	0.0	0.0	0.0	100.0
Secondary +	100.0	0.0	0.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

The breakdown by gender of the household head shows that female-headed households reported having food shortages more frequently than male-headed households as 70 percent of female-headed households experienced frequent food shortages compared to 67 percent of male-headed households. Likewise, while 73 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 21 percent.

6.2.2 Paying School Fees

Table 6.4 shows the percentage distribution of households by the difficulty in paying school fees during the year before the survey. At the time of the survey, 99 percent of the households in the district reported that they never had problems paying school fees and only 1 percent of the households reported that they seldom 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).

Cluster location, poverty status, land ownership, marital status and gender do not show strong correlation with the ability to pay school fees. On the other hand, smaller households find problems paying school fees less frequently than larger households. While all (100 percent) households with one or two members never had problems with paying school fees, the share for households with seven or more members is 95 percent.

Virtually all households owning large livestock and those owning small livestock never had problems with paying school fees compared to 95 percent of those owning no livestock.

Disaggregation of the data further shows that virtually all households where the main income earner belongs to the 'other' and 'self-employed other' categories never had problems with paying school fees compared to 93 percent of households where the main income earner is an employee.

Lastly, 99 percent of households where the head has no education never/seldom experienced problems paying school fees compared to 95 percent of households where the head has secondary education or more.

6.2.3 Paying House Rent

Table 6.5 shows the percent distribution of households by the difficulty in paying house rent during the year before the

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	20.6	33.9	30.8	14.7	100.0
Cluster Location					
Accessible	29.5	36.8	26.0	7.7	100.0
Remote	13.1	31.4	34.8	20.7	100.0
Poverty Status					
Poor	18.1	30.2	35.5	16.2	100.0
Non-poor	23.2	37.2	26.3	13.3	100.0
Household size					
1-2	19.2	47.7	13.9	19.2	100.0
3-4	19.5	35.0	29.9	15.6	100.0
5-6	19.5	35.5	34.0	11.0	100.0
7+	25.3	21.3	37.4	16.0	100.0
Area of land owned by the household					
None	17.2	34.5	32.2	16.1	100.0
< 1 ha	35.9	22.6	24.1	17.4	100.0
1-1.99 ha	14.4	36.8	33.1	15.7	100.0
2-3.99 ha	21.2	31.7	31.8	15.2	100.0
4-5.99 ha	28.2	38.4	28.7	4.7	100.0
6+ ha	21.1	45.4	25.7	7.8	100.0
Type of livestock owned by the household					
None	35.6	34.4	15.0	15.0	100.0
Small only	16.4	20.7	45.2	17.7	100.0
Large only	17.3	35.2	31.1	16.5	100.0
Both	19.7	34.4	31.4	14.5	100.0
Socio-economic Group					
Employee	50.9	38.3	10.8	0.0	100.0
Self-employed - agriculture	19.6	33.1	31.2	16.1	100.0
Self-employed - other	29.2	18.3	49.2	3.3	100.0
Other	3.5	56.1	28.0	12.4	100.0
Gender of the head of household					
Male	20.3	35.0	31.5	13.2	100.0
Female	22.9	26.3	25.6	25.2	100.0
Marital status of the head of household					
Single	16.4	52.6	24.4	6.5	100.0
Monogamous	24.8	38.1	26.5	10.7	100.0
Polygamous	18.1	30.9	35.7	15.3	100.0
Loose union	0.0	100.0	0.0	0.0	100.0
Widow/div/sep	22.2	28.8	22.9	26.1	100.0
Education level of the head of household					
None	18.6	32.8	33.5	15.2	100.0
Primary	19.6	38.2	26.4	15.8	100.0
Secondary +	62.3	26.9	10.8	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

survey. Virtually all households in the district reported that they never had problems paying house rent. All selected household characteristics such as cluster location, poverty status, household size, land ownership, livestock ownership, socio-economic group, gender, marital status and education level do not show correlation with the ability to pay house rent.

6.2.4 Paying Utility Bills

Table 6.6 shows the percent distribution of households by the difficulty in paying utility bills during the year before the survey. The outcome on household's ability to pay utility bills is similar to those of paying house rent. Virtually all households in the district faced no problems paying utility bills. All selected

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Table 6.8: Percentage of households owning certain assets

	Home	Land	Livestock			Vehicle	Motor-cycle	Bicycle	Wheel barrow
			Small	Large	Both				
Total	88.9	66.5	4.2	3.7	85.0	1.0	0.0	3.8	0.9
Cluster Location									
Accessible	88.4	83.4	4.8	4.3	80.8	2.1	0.0	6.9	1.9
Remote	89.4	52.1	3.7	3.2	88.6	0.0	0.0	1.1	0.0
Poverty Status									
Poor	92.8	65.9	4.6	3.4	89.8	0.0	0.0	2.8	0.2
Non-poor	85.1	66.9	3.9	4.0	80.3	2.0	0.0	4.8	1.5
Household size									
1-2	72.4	59.0	4.0	2.8	72.8	0.0	0.0	6.1	1.7
3-4	90.2	63.7	4.3	4.8	83.8	0.7	0.0	2.9	0.4
5-6	89.0	63.9	2.6	4.0	90.7	2.1	0.0	3.9	1.3
7+	96.3	79.5	6.4	1.8	85.9	0.6	0.0	3.7	0.5
Socio-economic Group									
Employee	27.6	48.4	4.4	4.4	35.6	11.4	0.0	13.3	4.4
Self-employed - agriculture	92.4	67.9	4.2	3.6	88.2	0.4	0.0	2.8	0.6
Self-employed - other	79.1	60.9	6.6	0.0	82.8	3.2	0.0	19.9	3.2
Other	93.6	61.3	2.6	8.1	75.9	0.0	0.0	0.0	0.0
Gender of the head of household									
Male	89.0	67.0	4.4	3.4	86.5	0.9	0.0	4.3	1.0
Female	88.5	63.1	2.8	5.3	74.7	1.6	0.0	0.0	0.0

Source: CWIQ 2006 Ngorongoro DC

Table 6.9: Percent distribution of households by occupancy status

	Own	Rent	Free	Other	Total
Total	88.9	1.2	3.2	6.6	100.0
Cluster Location					
Accessible	88.4	2.7	5.1	3.8	100.0
Remote	89.4	0.0	1.6	9.1	100.0
Poverty Status					
Poor	92.8	0.0	0.0	7.2	100.0
Non-poor	85.1	2.5	6.3	6.1	100.0
Household size					
1-2	72.4	5.1	14.3	8.3	100.0
3-4	90.2	1.7	2.3	5.9	100.0
5-6	89.0	0.0	1.4	9.6	100.0
7+	96.3	0.0	1.0	2.7	100.0
Socio-economic Group					
Employee	27.6	26.5	35.3	10.6	100.0
Self-employed - agriculture	92.4	0.0	1.5	6.1	100.0
Self-employed - other	79.1	0.0	6.6	14.3	100.0
Other	93.6	0.0	0.0	6.4	100.0
Gender of the head of household					
Male	89.0	0.9	2.7	7.3	100.0
Female	88.5	3.2	6.2	2.2	100.0

Source: CWIQ 2006 Ngorongoro DC

household characteristics such as cluster location, poverty status, household size, land ownership, livestock ownership, socio-economic group, gender, marital status and level of education do not show correlation with the ability to pay utility bills.

6.2.5 Paying for Healthcare

Table 6.7 shows the percent distribution of households by the difficulty in paying for healthcare during the year before the survey. 55 percent of the households reported that they never/seldom experienced problems paying for healthcare in the year prior to the survey. Disaggregation of the data further shows that 30 percent of households located in accessible clusters never experienced problems paying for healthcare compared to 13 percent of households located in remote clusters. Likewise, while 60 percent of non-poor households never/seldom experienced problems paying for healthcare, the share for poor households is 48 percent.

25 percent of households with seven or more members never had problems paying for healthcare compared to 19 percent of households with one or two members. Likewise, while 66 percent of households owning six or more hectares of land never/seldom had problems paying for healthcare, the share for households owning no land is 52 percent.

Furthermore, 36 percent of households owning no livestock never had problems paying for healthcare compared to 16

percent of those owning small livestock. Similarly, while 51 percent of households belonging to the 'employee' category never had problems paying for healthcare, the share for households belonging to the 'other' socio-economic group is only 4 percent. In contrast, 40 percent of

households belonging to the 'other' category frequently experienced problems paying for healthcare.

While 25 percent of households where the household head is monogamous never had problems paying for healthcare, the share

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	0.1	0.8	0.4	0.7	98.0	100.0	1.4
Cluster Location							
Accessible	0.3	1.8	0.9	1.5	95.5	100.0	3.0
Remote	0.0	0.0	0.0	0.0	100.0	100.0	0.0
Poverty Status							
Poor	0.0	0.0	0.0	0.8	99.2	100.0	0.0
Non-poor	0.2	1.6	0.8	0.6	96.7	100.0	2.7
Household size							
1-2	0.0	1.7	3.4	0.0	94.9	100.0	5.1
3-4	0.0	1.7	0.0	0.3	98.1	100.0	1.7
5-6	0.0	0.0	0.0	0.7	99.3	100.0	0.0
7+	0.6	0.0	0.0	1.9	97.6	100.0	0.6
Socio-economic Group							
Employee	2.5	17.7	8.8	4.4	66.5	100.0	29.0
Self-employed - agriculture	0.0	0.0	0.0	0.5	99.5	100.0	0.0
Self-employed - other	0.0	0.0	0.0	0.0	100.0	100.0	0.0
Other	0.0	0.0	0.0	0.0	100.0	100.0	0.0
Gender of the head of household							
Male	0.1	0.7	0.2	0.8	98.1	100.0	1.1
Female	0.0	1.6	1.6	0.0	96.8	100.0	3.2

Source: CWIQ 2006 Ngorongoro DC

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

	% of hhs using	Fertilizer	Improved seedling	Fingerlings	Hooks and nets	Insecticides	Other
Total	27.5	28.1	7.2	0.0	0.0	71.0	0.0
Cluster Location							
Accessible	34.0	40.2	11.8	0.0	0.0	57.9	0.0
Remote	22.1	12.4	1.3	0.0	0.0	88.0	0.0
Poverty Status							
Poor	27.4	21.9	0.0	0.0	0.0	78.1	0.0
Non-poor	27.8	34.1	14.2	0.0	0.0	64.1	0.0
Household size							
1-2	9.5	52.6	9.0	0.0	0.0	56.0	0.0
3-4	31.7	29.9	7.5	0.0	0.0	72.7	0.0
5-6	29.2	23.8	7.8	0.0	0.0	72.6	0.0
7+	28.2	26.3	5.6	0.0	0.0	68.0	0.0
Socio-economic Group							
Employee	29.7	74.3	38.2	0.0	0.0	46.9	0.0
Self-employed - agriculture	29.3	25.4	5.7	0.0	0.0	72.5	0.0
Self-employed - other	6.6	47.7	0.0	0.0	0.0	52.3	0.0
Other	7.8	32.8	0.0	0.0	0.0	67.2	0.0
Gender of the head of household							
Male	30.0	25.8	7.2	0.0	0.0	73.7	0.0
Female	10.8	71.5	8.3	0.0	0.0	20.2	0.0

Source: CWIQ 2006 Ngorongoro DC

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

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for households where the household head has a loose union is virtually null. On the other hand, virtually all households where the head has a loose union seldom experienced problems paying for healthcare. 55 percent of male-headed households never/seldom had problems paying for healthcare compared to 49 percent of female-headed households. Likewise, 62 percent of household heads with secondary education or more never had problems paying for healthcare compared to 19 percent of household heads with no education.

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, 89 percent of the district's households owns their dwellings while 67 percent owns some land. 85 percent of all households owns both small and large livestock while 4 percent of all households owns a bicycle.

Table 6.9 shows the percent distribution of households by occupancy status. While 83 percent of households located in accessible clusters owns some land, the share for households located in remote clusters is 52 percent. On the other hand, 93 percent of poor households owns their dwellings compared to 85 percent of non-poor households.

Disaggregation of the data shows that 96 percent of households with seven or more

members owns their dwellings compared to 72 percent of households with one or two members. Furthermore, while 94 percent of households belonging to the 'other' category owns their dwellings, the share for employees is 28 percent.

Disaggregation of the data further shows that while 67 percent of male-headed households owns some land, the share for female-headed households is 63 percent. It is also observed that 87 percent of male-headed households owns both small and large livestock compared to 75 percent of female-headed households. Likewise, 86 percent of households with seven or more members owns both small and large livestock compared to 73 percent of households with one or two members. Similarly, while 76 percent of households belonging to the 'other' category owns both small and large livestock, the share for households where the head belongs to the 'employee' socio-economic group is 36 percent.

Furthermore, while 90 percent of poor households owns both small and large livestock, the share for non-poor households is 80 percent. Likewise, 89 percent of households located in remote clusters owns both small and large livestock compared to 81 percent of households located in accessible clusters.

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 1 percent of the households possess formal occupancy documentation, which include a title deed, renting contract or payment receipt. 98 percent of households in this district have no documentation at all.

6.4 Agriculture

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

6.4.1 Agricultural Inputs

The survey collected information on agricultural practices. The dataset 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 complimented by Table 6.12, which shows the main source of agricultural inputs.

28 percent of farmers applies agricultural inputs to their farms and the majority (71 percent) of those who use farm inputs apply insecticides. 34 percent of households located in accessible clusters uses agricultural inputs compared to 22 percent of households located in remote clusters. Further breakdown of data shows that 88 percent of households in remote clusters use fertilisers compared to 58 percent of households in accessible clusters. Furthermore, while 78 percent of poor households applies insecticides, the share for non-poor households is 64 percent.

Disaggregation of the data further shows that as the number of household members increases, the usage of agricultural inputs also tends to increase as 28 percent of

households with seven or more members uses agricultural inputs compared to 10 percent of households with one or two members. Furthermore, while 30 percent of the employees uses agricultural inputs, the share for the self-employed in non-agricultural activities is 7 percent. Likewise, use of agricultural inputs in male-headed households is higher than in female-headed households. While 30 percent of male-headed households uses agricultural inputs the share for female-headed households is 14 percent.

Most households that use agricultural inputs purchase them at an open market (74 percent) and in second place obtain them by preparing them themselves (21 percent). While 3 percent of the households gets their inputs from cooperatives, 2 percent reported donor agency and none reported government as their main source.

The breakdown by cluster location shows that the percentage of households located in remote clusters who purchase agricultural inputs at an open market is higher than that of households located in accessible clusters at 82 and 67 percent respectively. In contrast, 30 percent of households located in accessible clusters obtains agricultural inputs by preparing

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

	Open market	Government	Donor agency	Coop.	Other	Total
Total	73.6	0.0	1.6	3.4	21.4	100.0
Cluster Location						
Accessible	67.4	0.0	1.5	1.3	29.8	100.0
Remote	82.1	0.0	1.7	6.2	10.0	100.0
Poverty Status						
Poor	73.8	0.0	0.0	4.4	21.8	100.0
Non-poor	73.5	0.0	3.0	2.4	21.1	100.0
Household size						
1-2	71.5	0.0	0.0	0.0	28.5	100.0
3-4	71.8	0.0	2.6	4.0	21.6	100.0
5-6	80.1	0.0	0.0	1.6	18.4	100.0
7+	68.4	0.0	2.0	5.5	24.1	100.0
Socio-economic Group						
Employee	70.3	0.0	0.0	14.9	14.9	100.0
Self-employed - agriculture	74.1	0.0	1.7	2.8	21.4	100.0
Self-employed - other	52.3	0.0	0.0	0.0	47.7	100.0
Other	67.2	0.0	0.0	0.0	32.8	100.0
Gender of the head of household						
Male	75.7	0.0	1.2	3.6	19.5	100.0
Female	35.0	0.0	8.3	0.0	56.8	100.0

Source: CWIQ 2006 Ngorongoro DC

1. Base is households using agricultural inputs

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them themselves compared to 10 percent of households located in remote clusters. On the other hand, poverty status does not show strong correlation with use of agricultural inputs.

In addition, while 29 percent of households with one or two members obtains agricultural inputs by preparing

them themselves, the share for households with seven or more members is 24 percent.

74 percent of households where the main income earner is self-employed in agriculture purchase their agricultural inputs at an open market compared to 52 percent of households belonging to the

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	33.5	12.4	23.3	18.1	7.9	4.6	100.0
Cluster Location							
Accessible	16.6	18.7	18.5	25.2	12.4	8.8	100.0
Remote	47.9	7.1	27.5	12.2	4.2	1.1	100.0
Poverty Status							
Poor	34.1	15.7	21.8	18.0	6.1	4.3	100.0
Non-poor	33.1	9.3	24.5	18.3	9.8	4.9	100.0
Household size							
1-2	41.0	11.1	29.0	13.8	5.1	0.0	100.0
3-4	36.3	9.4	22.7	20.4	8.8	2.5	100.0
5-6	36.1	14.5	20.2	15.8	8.2	5.2	100.0
7+	20.5	15.6	25.7	20.2	7.8	10.2	100.0
Socio-economic Group							
Employee	51.6	18.6	13.3	5.1	8.8	2.5	100.0
Self-employed - agriculture	32.1	12.3	23.3	19.8	7.8	4.9	100.0
Self-employed - other	39.1	14.9	23.0	5.7	14.2	3.2	100.0
Other	38.7	7.0	35.6	10.4	5.8	2.6	100.0
Gender of the head of household							
Male	33.0	11.9	24.3	16.7	9.1	5.0	100.0
Female	36.9	16.2	16.9	28.0	0.0	1.9	100.0

Source: CWIQ 2006 Ngorongoro 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	12.6	2.4	35.4	19.6	18.6	11.5	100.0
Cluster Location							
Accessible	15.5	2.1	35.7	19.0	14.7	13.0	100.0
Remote	10.2	2.7	35.1	20.0	21.9	10.2	100.0
Poverty Status							
Poor	8.9	3.1	34.7	21.7	18.9	12.7	100.0
Non-poor	16.3	1.3	36.2	17.5	18.4	10.3	100.0
Household size							
1-2	24.5	0.0	34.9	17.0	23.6	0.0	100.0
3-4	12.0	3.7	35.0	18.8	17.9	12.5	100.0
5-6	8.7	2.0	33.9	20.9	20.6	14.0	100.0
7+	12.4	2.1	38.4	20.5	13.9	12.8	100.0
Socio-economic Group							
Employee	60.0	0.0	31.4	4.9	0.0	3.7	100.0
Self-employed - agriculture	9.7	2.0	34.5	21.0	20.6	12.2	100.0
Self-employed - other	17.2	10.8	37.7	3.3	12.1	18.9	100.0
Other	16.0	6.1	54.2	19.5	4.2	0.0	100.0
Gender of the head of household							
Male	11.5	1.6	33.7	20.0	20.8	12.4	100.0
Female	20.0	7.9	46.5	16.4	3.8	5.4	100.0

Source: CWIQ 2006 Ngorongoro DC

'self-employed other' socio-economic group. In turn, about 48 percent of households where the main income earner belongs to the 'self-employed agriculture' category obtains agricultural inputs by preparing them themselves. Lastly, while 76 percent of male-headed households purchases agricultural inputs at an open market, the share for female-headed households is 35 percent. In contrast, 57 percent of female-headed households obtains agricultural inputs by preparing them themselves compared to 20 percent of male-headed households.

6.4.2 Landholding

Table 6.13 shows the percent distribution of households by the area of land owned. Around 69 percent of households own less than two acres of land (including 34 percent of landless households). 18 percent owns between two and four acres and 13 percent owns four or more acres.

Landless households are more common in remote clusters and households owning large portions of land are more common in accessible clusters. Likewise, the percentage of households owning large portions of land among non-poor households is higher than that of poor households, at 15 and 10 percent respectively.

Regarding household size, while 41 percent of households with one or two members are landless, the share for households with seven or more members is 21 percent. Furthermore, 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 (52 percent), the share for households where the main income earner is self-employed in agriculture is 32 percent. Finally, male-headed households have larger landholdings (4 or more acres) compared to female-headed households at 14 and 2 percent respectively.

6.4.3 Cattle Ownership

Table 6.14 shows the percent distribution of households by the number of cattle owned. Overall 13 percent of the

households own no cattle at all, and 35 percent owns between 2 and 10 heads of cattle. Households in accessible clusters are more likely to own no cattle as well as non-poor households. 25 percent of households with one or two members owns no cattle, compared to 12 percent of households with seven or more members. Likewise, 60 percent of households belonging to the 'employee' category owns no cattle compared to 10 percent of households belonging to the 'self-employed agriculture' category. Finally, while 20 percent of female-headed households owns no cattle, the share for male-headed households is 12 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.

41 percent the households reported the security situation was improving, 43 percent that it was the same and 16 percent that it was deteriorating. The percentage of households located in accessible clusters who reported the current crime and security situation as improving is higher than that of households located in remote clusters at 44 and 33 percent respectively. Likewise, 44 percent of poor households reported the current crime and security situation as improving compared to 38 percent of non-poor households.

While 44 percent of households with one or two members reported an improvement in the current crime and security situation, the share for households with seven or more members is 36 percent. Similarly, 44 percent of households owning no land reported the current crime and security situation as improving compared to 33 percent of households owning six or more hectares of land. While 44 percent of households owning small livestock reported an improvement in the current crime and security situation, the share for

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households owning no livestock is 27 percent.

While 49 percent of households where the main income earner belongs to the 'employee' category reported an improvement in the current crime and security situation, the share for households where the main income earner belongs to the 'other' category is 34 percent. In turn, 62 percent of households belonging to the

'self-employed other' category reported same conditions in the current crime and security situation. On the other hand, 16 percent of male-headed households reported the current crime and security situation as deteriorating compared to 12 percent of female-headed households.

While 33 percent of households where the household head is single reported deterioration in the current crime and

Table 6.15: Percent distribution of households by the perception of the crime 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	3.9	12.1	42.7	25.2	15.9	0.2	100.0
Cluster Location							
Accessible	4.7	10.7	40.7	28.6	15.4	0.0	100.0
Remote	3.2	13.3	44.4	22.4	16.3	0.4	100.0
Poverty Status							
Poor	5.1	14.8	36.3	26.3	17.5	0.0	100.0
Non-poor	2.6	9.5	48.8	24.3	14.4	0.4	100.0
Household size							
1-2	0.0	16.3	40.2	25.5	18.0	0.0	100.0
3-4	3.6	5.7	45.6	29.7	15.4	0.0	100.0
5-6	5.7	15.2	39.3	20.1	19.0	0.6	100.0
7+	4.0	16.6	44.1	24.5	10.9	0.0	100.0
Area of land owned by the household							
None	3.9	18.3	34.4	29.5	13.9	0.0	100.0
< 1 ha	0.8	4.2	50.7	21.7	22.7	0.0	100.0
1-1.99 ha	6.7	13.4	51.0	18.5	9.6	0.8	100.0
2-3.99 ha	2.4	3.7	36.8	33.0	24.1	0.0	100.0
4-5.99 ha	3.5	15.2	48.1	13.2	19.9	0.0	100.0
6+ ha	4.1	9.6	53.5	27.8	5.0	0.0	100.0
Type of livestock owned by the household							
None	3.9	4.5	64.8	12.9	13.8	0.0	100.0
Small only	0.0	2.8	53.3	28.0	16.0	0.0	100.0
Large only	11.8	5.4	55.2	10.0	17.6	0.0	100.0
Both	3.7	13.5	39.8	26.8	16.0	0.2	100.0
Socio-economic Group							
Employee	0.0	2.5	49.1	30.7	17.7	0.0	100.0
Self-employed - agriculture	3.8	12.9	41.8	24.5	16.8	0.2	100.0
Self-employed - other	0.0	2.3	61.8	35.9	0.0	0.0	100.0
Other	12.4	14.3	39.3	24.1	10.0	0.0	100.0
Gender of the head of household							
Male	4.2	12.3	42.9	24.0	16.3	0.2	100.0
Female	1.4	11.1	41.4	33.3	12.8	0.0	100.0
Marital status of the head of household							
Single	18.7	14.1	43.0	11.2	12.9	0.0	100.0
Monogamous	3.3	6.0	47.8	31.4	11.5	0.0	100.0
Polygamous	3.6	15.1	41.3	20.9	18.7	0.4	100.0
Loose union	0.0	0.0	0.0	100.0	0.0	0.0	100.0
Widow/div/sep	1.6	14.8	35.2	32.0	16.3	0.0	100.0
Education level of the head of household							
None	3.7	13.8	36.9	28.1	17.2	0.3	100.0
Primary	5.0	5.2	59.3	16.6	13.9	0.0	100.0
Secondary +	0.0	23.9	43.4	27.7	5.0	0.0	100.0

Source: CWIQ 2006 Ngorongoro DC

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

	Principal contributor of income				Total
	Head	Spouse	Child	Other	
Total	89.8	4.6	2.9	2.7	100.0
Cluster Location					
Accessible	88.7	6.0	2.7	2.6	100.0
Remote	90.6	3.5	3.1	2.8	100.0
Poverty Status					
Poor	86.5	7.6	3.1	2.8	100.0
Non-poor	93.0	1.7	2.8	2.6	100.0
Household size					
1-2	92.5	1.0	0.0	6.5	100.0
3-4	92.5	2.2	3.4	1.9	100.0
5-6	85.9	6.8	4.8	2.5	100.0
7+	88.9	7.9	1.1	2.1	100.0
Socio-economic Group					
Employee	94.9	0.0	0.0	5.1	100.0
Self-employed - agric	94.2	2.6	2.1	1.1	100.0
Self-employed - other	77.6	9.9	4.7	7.8	100.0
Other	8.9	44.4	20.3	26.4	100.0
Gender of the head of household					
Male	94.0	3.7	0.9	1.4	100.0
Female	61.5	11.0	16.3	11.2	100.0

Source: CWIQ 2006 Ngorongoro DC

security situation, the share for households where the head has a loose union is virtually null. In contrast, virtually all households where the head has a loose union reported the current crime and security situation as better. Lastly, the percentage of households where the head has no education and reported deterioration in the current crime and security situation is 4 percentage points higher than that of household heads with secondary education or more.

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 contributions by listing all the income contributors in the households and then identifying the household member who contributes the largest portion. For the majority (90 percent) of households the head is the main contributor.

Cluster location of the household does not show strong correlation with the main contributor to household income. On the other hand, while 93 percent of non-poor households reported the household head as

the main income contributor, the share for poor households is 87 percent.

93 percent of households with one or two members reported the household head as the main income contributor compared to 89 percent of households with seven or more members. On the other hand, 8 percent of households with seven or more members reported the spouse as the main income contributor compared to 1 percent of households with one or two members.

Furthermore, 95 percent of households belonging to the 'employee' category reported the household head as the main income contributor compared to only 9 percent of households belonging to the 'other' category. In contrast, 44 percent of households belonging to the 'other' category reported the spouse as the main income contributor. The breakdown by gender of the household head shows that 94 percent of male-headed households reported the household head as the main income contributor, while the share for female-headed households is 62 percent. In contrast, 16 percent of female-headed households reported the child as the main income contributor compared to 1 percent of male-headed households.

6.7 Other Household Items

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Table 6.17 shows the percentage distribution of households owning selected household items. 56 percent of households owns a watch or clock, 27 percent owns a radio, 23 percent owns at least one mattress or bed and 3 percent owns an electric iron. Although none of households owns a fixed line phone, 7 percent owns a mobile phone. Households in accessible clusters and non-poor households 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, the employees and the 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: Percentage of households owning selected household items

	Electric iron	Refrigerator	Sewing machine	Modern stove	Mattress or bed	Watch or clock	Radio	Television	Fixed line phone	Mobile phone
Total	2.7	0.3	0.3	1.8	23.4	55.9	27.4	1.8	0.0	7.3
Cluster Location										
Accessible	5.9	0.7	0.7	3.8	37.1	62.3	41.3	3.9	0.0	10.7
Remote	0.0	0.0	0.0	0.0	11.7	50.4	15.6	0.0	0.0	4.4
Poverty Status										
Poor	0.0	0.0	0.0	0.2	17.5	45.8	18.1	0.0	0.0	0.2
Non-poor	5.3	0.6	0.6	3.3	29.2	66.0	36.6	3.5	0.0	14.3
Household size										
1-2	6.0	0.0	1.7	1.7	25.1	51.8	23.0	3.4	0.0	10.2
3-4	3.1	0.6	0.0	1.9	24.1	53.5	30.7	2.2	0.0	8.5
5-6	1.7	0.0	0.0	1.4	17.6	61.5	25.9	1.4	0.0	7.6
7+	1.6	0.6	0.6	2.0	29.6	54.2	26.3	0.6	0.0	3.0
Socio-economic Group										
Employee	51.1	6.9	6.9	33.5	69.3	95.1	70.4	37.9	0.0	66.7
Self-employed - agriculture	0.3	0.0	0.0	0.2	21.3	52.9	25.6	0.0	0.0	3.7
Self-employed - other	0.0	0.0	0.0	0.0	34.3	76.3	32.9	0.0	0.0	25.7
Other	0.0	0.0	0.0	0.0	7.7	55.3	12.8	0.0	0.0	0.0
Gender of the head of household										
Male	2.6	0.4	0.4	1.8	24.4	58.5	30.4	1.6	0.0	7.5
Female	3.2	0.0	0.0	1.6	16.3	38.1	7.1	3.2	0.0	6.1

Source: CWIQ 2006 Ngorongoro DC

7 HOUSEHOLD AMENITIES

This chapter analyses the main amenities of the households in Ngorongoro 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 Housing 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, 49 percent of households has thatch as their main roof material, 9 percent has iron sheets, and 42 percent has roofs made of other types.

The breakdown by cluster location shows

that households in accessible villages are more likely to use thatch than households in remote villages at 58 and 41 percent respectively. In turn, households in accessible villages tend to use iron sheets more often. Similarly, 51 percent of non-poor households use thatch as their main roof material compared to 47 percent of poor households. On the other hand, while 12 percent of non-poor households use iron sheets, the share for poor households is only 3 percent.

The breakdown by household size shows that 56 percent of households with more than 7 members use thatch compared to 45 percent of households with 3 to 4 members. In turn, larger households are more likely to use iron sheets for their roofs, as 56 percent of households with more than 7 members use iron sheets. The split-up by socio-economic group shows that the 'other' category has the highest share of households using thatch for the roof (at 54 percent), and that the employees are the group that use thatch less at 16 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	1.1	48.8	0.0	7.8	0.0	0.0	0.0	42.4	100.0
Cluster Location									
Accessible	0.5	57.6	0.0	13.1	0.0	0.0	0.0	28.8	100.0
Remote	1.5	41.3	0.0	3.3	0.0	0.0	0.0	53.9	100.0
Poverty Status									
Poor	0.0	47.1	0.0	3.4	0.0	0.0	0.0	49.5	100.0
Non-poor	2.1	50.6	0.0	12.1	0.0	0.0	0.0	35.2	100.0
Household size									
1-2	0.0	54.7	0.0	16.2	0.0	0.0	0.0	29.1	100.0
3-4	2.2	44.5	0.0	7.0	0.0	0.0	0.0	46.3	100.0
5-6	0.8	46.9	0.0	4.3	0.0	0.0	0.0	48.0	100.0
7+	0.0	55.6	0.0	9.4	0.0	0.0	0.0	35.0	100.0
Socio-economic Group									
Employee	4.9	16.4	0.0	68.8	0.0	0.0	0.0	9.9	100.0
Self-employed - agriculture	0.6	50.6	0.0	4.7	0.0	0.0	0.0	44.0	100.0
Self-employed - other	7.8	38.7	0.0	12.3	0.0	0.0	0.0	41.3	100.0
Other	0.0	54.4	0.0	0.0	0.0	0.0	0.0	45.6	100.0
Gender of the head of household									
Male	0.9	48.4	0.0	8.2	0.0	0.0	0.0	42.5	100.0
Female	2.2	51.5	0.0	4.8	0.0	0.0	0.0	41.5	100.0

Source: CWIQ 2006 Ngorongoro DC

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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	82.0	0.0	2.6	7.3	7.3	0.0	0.9	100.0
Cluster Location								
Accessible	76.8	0.0	3.7	10.4	7.9	0.0	1.2	100.0
Remote	94.3	0.0	0.0	0.0	5.7	0.0	0.0	100.0
Poverty Status								
Poor	96.4	0.0	0.0	0.0	3.6	0.0	0.0	100.0
Non-poor	74.2	0.0	3.9	11.3	9.2	0.0	1.3	100.0
Household size								
1-2	57.0	0.0	11.4	11.4	20.2	0.0	0.0	100.0
3-4	87.4	0.0	2.3	6.8	1.3	0.0	2.3	100.0
5-6	82.4	0.0	0.0	7.2	10.4	0.0	0.0	100.0
7+	88.8	0.0	0.0	5.8	5.4	0.0	0.0	100.0
Socio-economic Group								
Employee	6.6	0.0	18.0	51.4	18.0	0.0	6.0	100.0
Self-employed - agriculture	94.9	0.0	0.0	0.0	5.1	0.0	0.0	100.0
Self-employed - other	84.6	0.0	0.0	0.0	15.4	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Gender of the head of household								
Male	83.0	0.0	2.0	6.7	7.3	0.0	1.0	100.0
Female	77.0	0.0	5.2	10.4	7.3	0.0	0.0	100.0

Source: CWIQ 2006Ngorongoro 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	96.0	0.0	0.0	4.0	0.0	0.0	100.0
Cluster Location							
Accessible	93.0	0.0	0.0	7.0	0.0	0.0	100.0
Remote	98.6	0.0	0.0	1.4	0.0	0.0	100.0
Poverty Status							
Poor	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Non-poor	92.1	0.0	0.0	7.9	0.0	0.0	100.0
Household size							
1-2	83.8	0.0	0.0	16.2	0.0	0.0	100.0
3-4	96.6	0.0	0.0	3.4	0.0	0.0	100.0
5-6	98.6	0.0	0.0	1.4	0.0	0.0	100.0
7+	98.4	0.0	0.0	1.6	0.0	0.0	100.0
Socio-economic Group							
Employee	31.2	0.0	0.0	68.8	0.0	0.0	100.0
Self-employed - agriculture	99.4	0.0	0.0	0.6	0.0	0.0	100.0
Self-employed - other	93.4	0.0	0.0	6.6	0.0	0.0	100.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Gender of the head of household							
Male	96.1	0.0	0.0	3.9	0.0	0.0	100.0
Female	95.2	0.0	0.0	4.8	0.0	0.0	100.0

Source: CWIQ 2006Ngorongoro DC

households use thatch more often than male-headed households, at 52 and 48 percent respectively.

Table 7.2 shows the distribution of households by type of material used in the

walls. Overall, 82 percent of house are built with mud or mud bricks.

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

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

	Single room	Flat	Two or more rooms	Whole building	Other	Total
Total	2.9	0.0	0.6	87.5	9.0	100.0
Cluster Location						
Accessible	4.1	0.0	1.4	88.0	6.6	100.0
Remote	1.9	0.0	0.0	87.0	11.1	100.0
Poverty Status						
Poor	0.5	0.0	0.0	91.7	7.8	100.0
Non-poor	5.3	0.0	1.2	83.2	10.3	100.0
Household size						
1-2	14.4	0.0	1.7	82.6	1.3	100.0
3-4	2.5	0.0	1.1	88.2	8.2	100.0
5-6	0.8	0.0	0.0	89.1	10.1	100.0
7+	0.0	0.0	0.0	86.8	13.2	100.0
Socio-economic Group						
Employee	43.5	0.0	13.3	38.2	5.1	100.0
Self-employed - agric	1.0	0.0	0.0	89.6	9.4	100.0
Self-employed - other	0.0	0.0	0.0	95.3	4.7	100.0
Other	0.0	0.0	0.0	91.8	8.2	100.0
Gender of the head of household						
Male	2.4	0.0	0.7	87.2	9.7	100.0
Female	6.5	0.0	0.0	89.3	4.2	100.0

Source: CWIQ 2006 Ngorongoro DC

households in accessible villages. The rates are 94 and 77 percent respectively. On the other hand, while 4 percent of households in accessible villages use burnt bricks, the share for households in remote villages is virtually null.

The analysis by poverty status reveals that poor households use mud or mud bricks more often than non-poor households at 96 and 74 percent respectively. In turn, 4 percent of non-poor households use burnt bricks as main material in the walls of the house compared to poor households which is virtually null. Similarly, 89 percent of households with more 7 members use mud or mud bricks as main material in the walls of the house compared to 57 percent of households with up to up to 2 members.

'Employee' is the category with lowest share living in house made of mud or mud bricks (6 percent), whereas virtually all members in the 'other' category have the highest share living in house made of mud or mud bricks (100 percent).

The gender breakdown shows that households headed by males use mud or mud bricks more often than female-headed households, at rates of 83 and 77 percent of males. In turn, 5 percent of female-headed households use burnt bricks

compared to 2 percent of male-headed households.

The distribution of households by type of material used in the floor is shown in Table 7.3. Overall, the floor in 96 percent of households is made of mud or dirt, and 4 percent of concrete or cement.

The breakdown by cluster location shows that households in accessible villages, with a rate of 7 percent, have a slightly higher share of house with concrete floor than households in remote villages, with a rate of 1 percent. In turn, households in remote villages have a higher share of house with mud or dirt floor (99 percent, against 93 percent households in accessible villages). Virtually all poor households (100 percent) have mud or dirt compared to 92 percent of non-poor households. On the other hand, 8 percent of non-poor households use concrete or cement as material for the floor.

The breakdown by household size shows that 99 percent households with up to 3 to 4 members use mud or dirt compared to 84 percent of households with 1 to 2 members. The split-up by socio-economic group of the household shows that employees have the lowest share of mud or dirt (31 percent) and the highest share of concrete (69 percent). All households

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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	Unprotected well	Rain water	River, lake or pond	Vendor, truck	Other	Total	Safe source
Total	6.8	13.7	4.2	0.9	21.8	0.3	52.2	0.2	0.0	100.0	11.9
Cluster Location											
Accessible	9.1	15.0	8.1	0.8	17.2	0.0	49.8	0.0	0.0	100.0	18.0
Remote	4.8	12.6	0.9	1.0	25.7	0.5	54.2	0.3	0.0	100.0	6.7
Poverty Status											
Poor	3.7	9.6	3.5	1.4	22.4	0.5	58.9	0.0	0.0	100.0	8.6
Non-poor	9.9	17.7	4.9	0.5	21.3	0.0	45.4	0.3	0.0	100.0	15.2
Household size											
1-2	16.2	13.0	2.4	0.0	20.6	0.0	47.8	0.0	0.0	100.0	18.5
3-4	5.0	16.6	4.5	0.6	24.9	0.0	47.9	0.5	0.0	100.0	10.2
5-6	4.8	11.9	4.6	1.8	23.3	0.0	53.7	0.0	0.0	100.0	11.2
7+	7.3	11.5	4.4	0.6	14.8	1.3	60.2	0.0	0.0	100.0	12.3
Socio-economic Group											
Employee	61.8	6.9	2.7	0.0	11.1	0.0	17.4	0.0	0.0	100.0	64.5
Self-employed - agric	4.3	13.9	4.0	1.0	23.2	0.3	53.3	0.0	0.0	100.0	9.3
Self-employed - other	0.0	9.8	3.5	0.0	11.1	0.0	70.9	4.7	0.0	100.0	3.5
Other	2.6	19.7	11.6	0.0	15.4	0.0	50.8	0.0	0.0	100.0	14.1
Gender of the head of household											
Male	6.5	14.4	4.6	0.9	23.2	0.3	49.9	0.2	0.0	100.0	12.0
Female	8.8	8.7	1.9	0.9	12.2	0.0	67.5	0.0	0.0	100.0	11.6

Source: CWIQ 2006Ngorongoro DC

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

	None (bush)	Flush to sewer	Flush to septic tank	Pan/ bucket	Covered pit latrine	Uncovered pit latrine	Ventilated pit latrine	Other	Total	Safe sanitation
Total	82.5	0.0	2.0	0.0	14.5	0.9	0.0	0.0	100.0	16.5
Cluster Location										
Accessible	85.9	0.0	4.3	0.0	9.3	0.4	0.0	0.0	100.0	13.7
Remote	79.7	0.0	0.0	0.0	18.9	1.4	0.0	0.0	100.0	18.9
Poverty Status										
Poor	86.7	0.0	0.0	0.0	11.9	1.4	0.0	0.0	100.0	11.9
Non-poor	78.4	0.0	3.9	0.0	17.2	0.5	0.0	0.0	100.0	21.1
Household size										
1-2	86.8	0.0	6.8	0.0	6.4	0.0	0.0	0.0	100.0	13.2
3-4	81.3	0.0	1.7	0.0	17.0	0.0	0.0	0.0	100.0	18.7
5-6	83.1	0.0	1.4	0.0	14.8	0.8	0.0	0.0	100.0	16.1
7+	81.5	0.0	0.6	0.0	14.5	3.4	0.0	0.0	100.0	15.1
Socio-economic Group										
Employee	26.3	0.0	42.3	0.0	31.4	0.0	0.0	0.0	100.0	73.7
Self-employed - agriculture	85.7	0.0	0.0	0.0	13.2	1.1	0.0	0.0	100.0	13.2
Self-employed - other	77.4	0.0	0.0	0.0	22.6	0.0	0.0	0.0	100.0	22.6
Other	84.2	0.0	0.0	0.0	15.8	0.0	0.0	0.0	100.0	15.8
Gender of the head of household										
Male	82.3	0.0	1.8	0.0	14.8	1.1	0.0	0.0	100.0	16.6
Female	84.3	0.0	3.2	0.0	12.5	0.0	0.0	0.0	100.0	15.7

Source: CWIQ 2006Ngorongoro DC

where the main income earner belongs to the 'other' category have house with mud or dirt floor.

The gender breakdown shows that 96 percent male-headed households use mud or dirt compared to 95 percent of female-headed households.

Table 7.4 shows the percent distribution of households by type of housing unit they occupy. Overall, 88 percent of households occupy the whole building where they live.

The breakdown by cluster location or gender does not show strong differences on the type of housing unit households occupy.

Analysis by poverty status reveals that 92 percent of poor households occupy a whole building compared with 83 percent of non-poor households. The breakdown by household size shows that 89 percent households with 5 to 6 members occupies the whole building where they live compared to 83 percent households with 1 to 2 members. The split-up by socio-economic group of the household shows that employees have the lowest share of occupying a whole building (38 percent) and those self-employed in non-agricultural activities have the highest share at (95 percent).

7.2 Water and Sanitation

The percentage distribution of households by source of drinking water is shown in Table 7.5. Overall, 12 percent of households have a safe source of water, whereas 22 percent of them gets it from an unprotected well and 52 percent of households gets drinking water from a river, lake or pond. Safe sources of drinking water are treated pipes, bore holes, hand pumps, and protected wells

The analysis of cluster location shows that 18 percent of households in accessible villages has a safe source of drinking water, whereas the share of households in remote villages is 7 percent. On the other hand, 54 percent of households in remote villages gets drinking water from a river, lake or pond, against 50 percent of households in accessible villages. Poverty status of the household reveals that 15 percent of non-poor households use safe sources of water, against 9 percent of poor households. In turn, 59 percent of poor households gets their drinking water from a river, lake or pond, against 45 percent of non-poor households.

When analysing by household size, it is noticed that 19 percent of households with 1 or 2 members have a safe source of drinking water compared to 10 percent of households with 3 to 4 members. The

shares of households with unprotected wells are 25 percent of households with 3 to 4 members and 15 percent for households with 7 or more members.

The breakdown by socio-economic group of the household shows that 'employee', is the category with the highest rate of access to safe sources of drinking water (65 percent), followed by the 'other' category (14 percent), while 'self employed-other' is the category with the lowest access to safe water (4 percent). On the other hand, 11 percent of the households where the main income earner belongs to either 'employee' and the 'self-employed other' category gets drinking water from an unprotected well compared to 23 and 15 percent of households where the main income earner is in the 'employee' or 'other' categories respectively.

The breakdown by gender of the household head does not show strong correlation with the source of drinking water type.

Table 7.6 shows the percentage distribution of households by main type of toilet. Overall, 17 percent of households has safe sanitation, whereas up to 15 percent use a covered pit latrine. 83 percent of households have no toilet.

The breakdown by household size and gender does not show strong correlation with type of sanitation. The cluster location breakdown shows that 19 percent of households in remote villages have safe sanitation, while the share for households in accessible is 14 percent. Similarly, 21 percent of non-poor households have safe sanitation compared to 12 percent of poor households.

The breakdown by socio-economic status shows that employees have the highest rate of safe sanitation, at 74 percent, while the 'self-employed in agriculture' category has the lowest rate of safe sanitation at 13 percent.

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. 98 percent of households in remote villages use firewood compared to 93 percent of households in accessible clusters. The breakdown by poverty status

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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	95.9	0.0	0.4	0.2	2.5	0.0	0.0	1.0	100.0	3.1
Cluster Location										
Accessible	93.2	0.0	0.9	0.5	5.4	0.0	0.0	0.0	100.0	6.8
Remote	98.1	0.0	0.0	0.0	0.0	0.0	0.0	1.9	100.0	0.0
Poverty Status										
Poor	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Non-poor	91.8	0.0	0.8	0.4	4.9	0.0	0.0	2.1	100.0	6.2
Household size										
1-2	88.1	0.0	1.7	1.7	8.5	0.0	0.0	0.0	100.0	11.9
3-4	95.8	0.0	0.6	0.0	2.2	0.0	0.0	1.4	100.0	2.8
5-6	96.9	0.0	0.0	0.0	1.4	0.0	0.0	1.7	100.0	1.4
7+	99.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	100.0	1.0
Socio-economic Group										
Employee	33.7	0.0	8.8	4.4	53.0	0.0	0.0	0.0	100.0	66.3
Self-employed - agric	98.8	0.0	0.0	0.0	0.0	0.0	0.0	1.2	100.0	0.0
Self-employed - other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Gender of the head of household										
Male	96.0	0.0	0.5	0.2	2.1	0.0	0.0	1.2	100.0	2.8
Female	95.2	0.0	0.0	0.0	4.8	0.0	0.0	0.0	100.0	4.8

Source: CWIQ 2006Ngorongoro DC

and the household size reveals that virtually all poor households (100 percent) use firewood for cooking compared to 92 percent of the non-poor households.

There appears to be no strong correlation between gender of the household head and type of fuel used for cooking. The split-up by socio-economic group of the household shows that virtually all households where the main income earner is self-employed in non-agricultural activities and in the 'other' category use firewood compared to 34 percent of the households where the main income earner is an employee.

Table 7.8 shows the distribution of households according to the fuel used for lighting. Overall, 73 percent of the households in the district use firewood and 22 percent use kerosene or paraffin. Gas and candles are virtually not used for lighting in the district.

The analysis of cluster location shows that about 35 percent of households in accessible villages use kerosene/paraffin compared with 11 percent of households in remote villages. It is observed that 87 percent of remote households use firewood for fuel compared to 57 percent of the accessible households. There is no correlation between poverty status on the use of kerosene and paraffin. However 78

percent of poor households use firewood compared to 68 percent of non-poor households.

The breakdown by household size reveals that 35 percent of households with 7 or more members use kerosene/paraffin compared to 9 percent of households with up to 2 members. On the other hand, 78 percent of households with 3 to 4 members use firewood compared to 63 percent with 7 or more members.

The analysis by socio-economic group of the household shows that households belonging to the 'other' category have the highest rate of use of firewood at 88 percent compared to about 21 percent in the 'employee' category. In turn, 30 percent of households belonging to the self-employed in non-agricultural activities category use kerosene and paraffin.

Finally, male-headed households are more likely to use kerosene/paraffin than female-headed households at 22 and 16 percent respectively. On the other hand, 77 percent of female-headed households use firewood compared to 73 percent of male-headed households.

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	21.6	0.0	1.9	1.2	0.6	0.0	73.1	1.7	100.0
Cluster Location									
Accessible	34.8	0.0	4.1	2.5	0.7	0.0	56.9	1.1	100.0
Remote	10.5	0.0	0.0	0.0	0.5	0.0	86.7	2.3	100.0
Poverty Status									
Poor	21.8	0.0	0.0	0.0	0.0	0.0	77.7	0.6	100.0
Non-poor	21.5	0.0	3.7	2.3	1.2	0.0	68.4	2.9	100.0
Household size									
1-2	9.2	0.0	10.2	1.7	0.9	0.0	73.7	4.3	100.0
3-4	18.7	0.0	1.7	1.1	0.8	0.0	77.7	0.0	100.0
5-6	20.8	0.0	0.0	1.4	0.3	0.0	74.3	3.3	100.0
7+	35.3	0.0	0.0	0.6	0.6	0.0	62.6	1.0	100.0
Socio-economic Group									
Employee	9.8	0.0	39.8	24.6	0.0	0.0	21.4	4.4	100.0
Self-employed - agric	22.4	0.0	0.0	0.0	0.7	0.0	75.1	1.7	100.0
Self-employed - other	29.5	0.0	0.0	0.0	0.0	0.0	70.5	0.0	100.0
Other	11.6	0.0	0.0	0.0	0.0	0.0	88.4	0.0	100.0
Gender of the head of household									
Male	22.4	0.0	1.7	1.1	0.7	0.0	72.5	1.7	100.0
Female	16.4	0.0	3.2	1.6	0.0	0.0	76.7	2.1	100.0

Source:CWIQ 2006Ngorongoro DC

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	24.9	13.8	19.7	41.6	100.0	4.9	7.3	7.3	80.5	100.0
Cluster Location										
Accessible	38.8	19.0	20.3	21.9	100.0	9.5	14.1	13.0	63.4	100.0
Remote	13.1	9.4	19.1	58.4	100.0	1.0	1.5	2.5	95.0	100.0
Poverty Status										
Poor	18.9	16.4	20.5	44.2	100.0	1.0	5.9	9.0	84.0	100.0
Non-poor	31.0	11.3	18.8	38.9	100.0	8.7	8.6	5.7	77.0	100.0
Household size										
1-2	28.5	9.2	12.8	49.5	100.0	12.9	2.9	2.6	81.6	100.0
3-4	27.8	10.0	22.9	39.2	100.0	5.6	9.2	8.6	76.6	100.0
5-6	22.6	17.8	15.8	43.8	100.0	2.1	8.7	4.9	84.2	100.0
7+	21.0	17.3	23.4	38.2	100.0	2.8	4.3	11.5	81.4	100.0
Socio-economic Group										
Employee	78.6	0.0	6.4	15.0	100.0	66.3	7.4	2.7	23.6	100.0
Self-employed - agric	22.4	14.4	20.2	43.0	100.0	1.2	7.5	7.4	83.9	100.0
Self-employed - other	13.3	12.3	17.5	56.9	100.0	9.8	11.2	14.8	64.2	100.0
Other	27.5	16.9	24.7	30.8	100.0	8.0	0.0	5.4	86.6	100.0
Gender of the head of household										
Male	24.4	14.3	17.7	43.6	100.0	4.9	7.1	6.5	81.5	100.0
Female	28.4	10.1	33.0	28.5	100.0	4.8	8.6	12.7	73.9	100.0

Source:CWIQ 2006Ngorongoro DC

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.

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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	10.0	14.7	12.4	62.9	100.0	0.7	0.9	2.4	96.0	100.0
Cluster Location										
Accessible	15.7	26.4	17.0	40.9	100.0	1.5	2.0	5.2	91.2	100.0
Remote	5.1	4.8	8.6	81.5	100.0	0.0	0.0	0.0	100.0	100.0
Poverty Status										
Poor	5.2	11.4	12.8	70.6	100.0	0.7	0.9	2.1	96.3	100.0
Non-poor	14.7	18.1	12.1	55.2	100.0	0.7	0.9	2.7	95.7	100.0
Household size										
1-2	15.5	10.3	14.0	60.2	100.0	1.0	0.0	2.7	96.3	100.0
3-4	11.7	16.0	10.1	62.2	100.0	0.0	0.6	2.1	97.2	100.0
5-6	8.6	15.2	12.2	64.1	100.0	1.2	1.6	0.8	96.5	100.0
7+	5.6	14.5	16.0	63.9	100.0	1.1	1.1	4.9	92.8	100.0
Socio-economic Group										
Employee	58.2	18.1	0.0	23.6	100.0	0.0	0.0	6.9	93.1	100.0
Self-employed - agric	6.8	13.5	13.8	65.9	100.0	0.4	0.8	1.4	97.3	100.0
Self-employed - other	9.8	36.8	11.1	42.3	100.0	3.2	0.0	15.1	81.7	100.0
Other	21.1	17.6	0.0	61.4	100.0	5.2	5.1	5.6	84.0	100.0
Gender of the head of household										
Male	10.1	13.5	12.2	64.2	100.0	0.8	1.1	1.8	96.3	100.0
Female	8.7	23.1	13.9	54.4	100.0	0.0	0.0	6.0	94.0	100.0

Source: CWIQ 2006Ngorongoro DC

It must be kept in mind that distance to 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, 39 percent of households are located under 30 minutes of a drinking water supply. In addition, 12 percent of the households are located under 30 minutes of a health facility.

The breakdown by cluster location shows that 38 percent of households in accessible villages have access to a drinking water source and 24 percent to a health facility, whereas the shares for households in remote villages are 23 and 3 percent. Similar differences are observed by poverty status, with non-poor households having higher access rates than poor households. Household size does not seem to be strongly correlated with access to drinking water supply although households with 1 or 2 members have the highest rate of access to health facilities (16 percent).

Households where the main income earner is an employee have the highest rate of

access to drinking water (79 percent) and access to health facilities at 74 percent, whereas households belonging to the 'other' category have the lowest access to health facilities at 8 percent.

The breakdown by gender of the household head shows that gender does not seem to correlate with access rate to drinking water supply and health facilities.

Table 7.10 shows the percent distribution of households by time to reach the nearest primary and secondary school. Overall, 25 percent of households is located within 30 minutes of a primary school. However, only 2 percent of households lives within 30 minutes of a 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.

The analysis of cluster location shows that 10 percent of households in remote villages have access to primary school, against 42 percent in accessible villages. For secondary school, the rates go down to 0 and 3 percent, respectively. On the other hand, poverty status of the household does not appear to be correlated with access to school secondary. However, non-poor households have higher access to a

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	4.2	6.1	7.9	81.9	100.0	15.4	8.7	9.9	66.0	100.0
Cluster Location										
Accessible	6.6	8.0	12.3	73.1	100.0	27.0	12.9	13.6	46.5	100.0
Remote	2.1	4.4	4.1	89.4	100.0	5.5	5.2	6.9	82.4	100.0
Poverty Status										
Poor	2.2	4.3	7.9	85.6	100.0	14.1	8.9	7.2	69.8	100.0
Non-poor	6.1	7.8	7.9	78.2	100.0	16.7	8.6	12.7	62.1	100.0
Household size										
1-2	7.8	4.8	8.3	79.1	100.0	18.2	5.3	7.3	69.2	100.0
3-4	4.3	6.8	7.0	82.0	100.0	15.1	10.4	10.0	64.5	100.0
5-6	4.0	5.0	6.6	84.3	100.0	18.6	7.5	9.8	64.1	100.0
7+	2.1	7.0	11.1	79.9	100.0	9.5	9.5	11.6	69.4	100.0
Socio-economic Group										
Employee	42.3	0.0	13.7	44.0	100.0	78.6	0.0	6.4	15.0	100.0
Self-employed - agric	1.9	6.4	7.7	84.0	100.0	11.5	9.0	10.1	69.4	100.0
Self-employed - other	0.0	6.6	7.8	85.6	100.0	27.9	14.5	12.5	45.1	100.0
Other	11.5	5.4	5.4	77.8	100.0	14.4	6.8	9.3	69.5	100.0
Gender of head of household										
Male	4.3	6.2	6.7	82.9	100.0	14.8	8.8	8.4	68.0	100.0
Female	3.2	5.3	15.8	75.6	100.0	19.2	8.0	20.1	52.7	100.0

Source: CWIQ 2006 Ngorongoro DC

primary school than poor households at 33 and 17 percent respectively.

Household size does not seem to correlate with access to both primary and secondary schools.

The breakdown by socio-economic group shows that households in the 'employee' category have the highest rate of access to primary and that households where the main income earner is in the 'other' category have the highest rate of access to secondary schools, at 70 and 10 percent, respectively. Households in the category 'self-employed agriculture' have the lowest access rate to primary schools at 20 percent.

Households headed by females have higher access rates to primary school than male-headed households, at 32 percent, against 24 percent for females. Access to secondary education by households headed by females is virtually null.

Table 7.11 shows the percent distribution of households by time to reach the nearest food market and public transportation. Overall, 10 percent of households has access to a food market, and 24 percent to public transportation.

The analysis of cluster location shows that 15 percent of households in accessible villages lives within 30 minutes of a food

market and, against 7 of households in remote villages. The shares for public transportation are 40 for accessible and 11 percent for households in remote villages. Non-poor households have higher rates of access to food markets, with a rate of 14 percent, against 7 of non-poor.

Household size and gender does not seem to correlate with access to food market and public transportation. Although analysis by socio-economic group reveals that employees have the highest rate of access to food markets and public transportation, with 42 percent and 79 percent respectively.

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, 24 percent of households take measures against malaria. The most commonly taken measures are herbs (42 percent), anti-malaria's (25 percent) and burning leaves (14 percent).

The analysis of cluster location shows that 26 percent of households in remote villages take measures against malaria, compared to 22 percent of households in accessible villages. On the other hand, while 33 percent of households in

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accessible villages use herbs, the share for households in remote villages is 49 percent.

Furthermore, 29 percent of non-poor households take measures against malaria compared to 18 percent of poor households. The rates for maintenance of good sanitation are lower, though non-poor households tend to maintain good sanitation than poor households at 8 and 1 percent respectively.

The share of households taking measures tends to increase with the size of the household but there are no clear trends by measure taken. The analysis of socio-economic status shows that 42 percent households in the category 'self-employed other' takes measures, 41 percent of 'employee', 23 percent of 'self-employed agriculture', and only 11 percent of 'other'. Finally, 26 percent of households headed by males takes measures against malaria compared to 12 percent of households headed by females. Male-headed households use herbs more frequently than female-headed households at 78 and 39 percent respectively. In turn, a higher share of the latter maintains good sanitation.

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	23.7	11.8	0.7	25.4	0.5	9.2	1.7	5.1	41.6	14.3	0.0
Cluster Location											
Accessible	21.6	13.3	0.0	33.1	1.2	14.7	4.2	6.7	32.9	4.0	0.0
Remote	25.5	10.8	1.1	19.9	0.0	5.2	0.0	4.0	47.8	21.6	0.0
Poverty Status											
Poor	18.4	5.4	0.0	28.6	0.0	7.3	0.0	0.9	46.4	18.0	0.0
Non-poor	29.0	15.9	1.1	23.5	0.8	10.4	2.8	7.8	38.6	12.0	0.0
Household size											
1-2	18.2	12.2	0.0	17.9	0.0	0.0	0.0	0.0	69.9	0.0	0.0
3-4	22.2	14.7	1.9	30.9	0.0	14.5	0.0	6.3	32.0	15.0	0.0
5-6	26.4	10.6	0.0	27.1	0.0	2.6	5.2	7.3	44.2	20.5	0.0
7+	25.7	9.2	0.0	17.6	2.2	14.8	0.0	2.4	40.7	9.8	0.0
Socio-economic Group											
Employee	41.3	0.0	0.0	28.0	6.1	38.2	21.4	21.4	12.4	0.0	0.0
Self-employed - agric	22.7	10.6	0.8	25.1	0.0	5.4	0.0	4.1	45.4	17.1	0.0
Self-employed - other	41.9	46.8	0.0	15.6	0.0	23.9	0.0	0.0	29.3	0.0	0.0
Other	10.5	0.0	0.0	59.9	0.0	0.0	0.0	0.0	40.1	0.0	0.0
Gender of the head of household											
Male	25.5	12.6	0.7	26.6	0.5	9.8	0.9	4.6	39.2	15.2	0.0
Female	11.5	0.0	0.0	8.5	0.0	0.0	13.9	13.9	77.6	0.0	0.0

Source: CWIQ 2006Ngorongoro DC

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 [...] in the past 12 months?”. This question was repeated 4 times with the dots replaced by kitongoji, village, ward and district. The results show a general decline in meeting attendance with increasing level of local government. Results show that 79 percent of households had at least one member attending at least one kitongoji meeting in the past 12 months. Attendance at village meetings was also high at 66 percent. However, ward and district level meetings did not attain the quorum as a few households were represented at only 18 and 2 percent respectively.

Data as presented in table 8.1 show that there is no much difference observed in meeting attendance relative to location especially at kitongoji, village and ward meeting levels.

Looking at the breakdown of the results by poverty status, it can be seen that there is no considerable differences in attendance at kitongoji village and ward meetings; although members of poor households seem to have better attendance rates at district level meetings. Analysis of the results by socio-economic groups indicates virtually null representation of households in the ‘other’ socio-economic category and ‘self-employed other’ in district level meetings. The ‘self-employed agriculture’ and ‘other’ groups reported the highest attendance rates. at kitongoji and village level meetings. Generally,

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	77.8	65.8	17.6	1.5
Cluster Location				
Accessible	76.9	68.4	17.2	0.8
Remote	78.5	63.6	17.9	2.2
Poverty Status				
Poor	79.5	66.6	18.7	2.8
Non-poor	75.9	64.8	16.5	0.3
Socio-economic Group				
Employee	47.0	33.7	9.8	4.9
Self-employed - agriculture	80.6	69.1	18.1	1.5
Self-employed - other	52.1	33.7	14.6	0.0
Other	75.3	60.2	17.6	0.0
No. of Obs.	448	448	448	448

Source: CWIQ 2006 Ngorongoro DC

ward and district level meetings are characterised by lower attendance rates by all groups.

8.2 Satisfaction with Leaders

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

The results, displayed in Table 8.2, show a clear trend of satisfaction with leaders going up as the level of government goes down. While, respectively, 93 percent, 89 percent and 68 percent of respondents say they are satisfied with kitongoji, village and ward leaders, a sharp decline is observed to 41 percent for the district leaders. It worth mentioning that the proportion of respondents who specifically reported dissatisfaction with leaders at the district levels of government is only 12 percent. It can be noted that larger

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Table 8.2: Distribution of leaders' satisfaction ratings and reasons for dissatisfaction

	Kitongoji Leaders	Village Leaders	Ward Leaders	District Leaders	District Councillor
Total					
Satisfied	92.6	88.6	68.1	40.9	77.5
Not Satisfied	5.3	7.8	10.3	12.0	19.8
Don't Know	2.1	3.6	21.6	47.1	2.7
Share Satisfied by Cluster Location					
Accessible	94.5	90.0	71.6	40.0	81.4
Remote	91.0	87.4	65.1	41.7	74.1
Share Satisfied by Poverty Status					
Poor	95.0	90.2	69.3	43.1	78.3
Non-poor	90.2	86.9	66.9	38.6	76.6
Share Satisfied by Socio-economic Group					
Employee	82.3	77.9	60.2	46.5	53.5
Self-employed - agriculture	93.1	89.7	70.0	41.8	80.1
Self-employed - other	83.5	63.8	38.9	30.3	56.6
Source: CWIQ 2006 Ngorongoro DC	100.0	97.2	64.2	27.8	68.3
Reasons for Dissatisfaction (incl. don't know)					
Political differences	0.0	0.0	0.0	0.0	0.0
Embezzlement/corruption	6.6	14.4	4.6	0.8	3.6
They do not listen to people	28.6	23.5	6.5	1.0	11.1
Favouritism	7.8	16.1	4.1	1.3	5.0
Lazy/inexperienced	0.0	5.7	3.1	0.2	5.6
Personal Reasons	4.9	4.7	4.0	1.9	4.2
I see no results	57.6	39.3	19.8	10.7	22.3
They never visit us	11.6	26.4	71.5	85.3	60.6
No. of Obs.	448	448	448	448	448

Source: CWIQ 2006 Ngorongoro 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?'

proportions of respondents (around 47 percent) answered 'I don't know'. Around 78 percent of respondents were satisfied with the work of their district councillor, while 20 percent were not satisfied and about 3 percent answered with 'I don't know'.

While retaining the general trend of increasing satisfaction with declining levels of government leadership, disaggregating data by the results by accessibility does not show considerable difference among respondents in either accessible or remote clusters. Similar observation is portrayed in further disaggregating of results by the poverty status of the household.

The breakdown by socio-economic group suggests that the 'other' category has

higher satisfaction rate in kitongoji and village levels. On the other hand, the 'self-employed agriculture' group reports consistently higher shares of satisfaction across all levels of government, including district councillor, than other socioeconomic groups.

Finally, all respondents who answered that they were not satisfied or that they did not know whether they were satisfied to the question regarding satisfaction with the leaders at a certain level of government where asked to provide reasons. The bottom part of Table 8.2 summarises the responses. Note that the base for the percentages here is the number of people who answered 'don't know' or 'no' to the question of whether they were satisfied with their leaders at the specified level.

Table 8.3: Percentage distribution of households who received financial information in the past 12 months

	Kitongoji Finances	Village Finances	Ward Finances	District Finances
Total	21.4	20.9	4.2	1.2
Cluster Location				
Accessible	17.8	19.7	3.5	0.3
Remote	24.3	21.9	4.7	1.9
Poverty Status				
Poor	19.8	20.1	3.8	2.1
Non-poor	22.5	21.5	4.5	0.3
Socio-economic Group				
Employee	0.0	0.0	0.0	0.0
Self-employed - agriculture	23.6	23.3	4.6	1.3
Self-employed - other	3.5	10.0	0.0	0.0
Other	14.1	6.3	2.8	0.0
Source				
Letter	0.6	0.6	0.0	0.0
Notice board	0.0	0.0	0.0	0.0
Meeting	85.0	88.7	72.4	100.0
Rumours/hear-say	8.0	4.2	4.9	0.0
Radio/newspapers	0.0	0.0	0.0	0.0
No. of Obs.	448	448	448	448

Source: CWIQ 2006 Ngorongoro DC

The reasons for dissatisfaction are very different across the different levels of government. At the kitongoji and village levels it can be noted that reasons for dissatisfaction were mainly attributed to 'no results' at 58 percent and 39 percent respectively and 'they do not listen to people'. Failure of leaders to pay visit to the community is a major concern of the majority of respondents in the ward and district government levels as well as for the district councillor. Political difference is not an important reason for dissatisfaction on leadership at all levels of government.

8.3 Public Spending

This section discusses the results of questions on the extent to which financial information reached the respondents, as well as their satisfaction with public spending. Table 8.3 shows the distribution of the percentage of respondents that reported having received financial information from four different levels of government. Information on kitongoji and village finances reaches larger share of households than ward and district finances. It is clearly shown in table 8.3 that information on ward and district finances reach only 4 and 1 percent of

households, respectively. It can further be noted that, overall, information on finances reach slightly more households in remote clusters in the past twelve months than households in accessible clusters across all local government levels. Disaggregating households by poverty status results in a similar trend.

The distribution of households that received financial information by socio-economic groups show that the self-employed in agriculture reports the highest shares receiving information on public finances at all levels of government. The employee category did not receive information on finances at all levels.

The data as presented in table 8.3 clearly show that attendance in meetings were the main source of information in all local government levels. No other source of information was mentioned for district finances. Rumours or hear-say were the second most mentioned source of information.

Respondents were asked whether they were satisfied with spending at different levels of government and were requested to respond with either 'yes', 'no' or 'don't know'. Table 8.4 shows the results. Satisfaction with spending is slightly

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higher for lower levels of government. While around 71 and 62 percent of respondents were satisfied with kitongoji and village spending respectively, only 40 and 31 percent, respectively, reported the same for ward and district spending. This does not, however, mean that respondents specifically report dissatisfaction with spending for higher levels of government, rather the share of respondents reporting 'I don't know' increases, going up to 58 percent at district level.

The satisfaction by cluster location suggest that the share of respondents satisfied with the public spending at all levels of government is slightly higher in the accessible clusters than remote clusters. The breakdown by poverty status suggests that satisfaction with public spending is slightly higher among respondents in non-poor households. The breakdown by socio-economic groups indicates that the 'other' socio-economic group reports higher shares of satisfied households.

Further probing on why respondents were not satisfied, or why they did not know whether they were satisfied, the most

common response ranging from 80 to 88 percent across all levels was that they did not receive any information. The second most important response was that they 'see no results' followed by embezzlement/corruption in the public spending. Only small proportions of respondents associated their dissatisfaction in public spending with reasons such as 'favouritism' and 'this is what I hear'.

Table 8.4: Satisfaction with public spending and reasons for dissatisfaction

	Kitongoji Spending	Village Spending	Ward Spending	District Spending
Total				
Satisfied	70.8	61.9	40.3	31.0
Not Satisfied	8.4	12.1	13.7	10.8
Don' Know	20.8	26.0	46.0	58.3
Share Satisfied by Cluster Location				
Accessible	71.0	63.3	41.7	33.4
Remote	70.6	60.7	39.2	28.9
Share Satisfied by Poverty Status				
Poor	67.1	59.9	37.4	29.5
Non-poor	74.3	63.8	42.9	32.2
Share Satisfied by Socio-economic Group				
Employee	61.0	47.8	37.2	37.2
Self-employed - agriculture	71.1	62.5	40.5	30.4
Self-employed - other	63.8	45.4	29.0	28.0
Other	79.9	79.8	50.2	37.6
Reasons for Dissatisfaction (incl. don't know)				
I see no results	17.7	12.9	8.4	11.9
Embezzlement/corruption	6.8	14.4	7.5	1.9
Favouritism	0.4	0.8	0.2	0.7
This is what I hear	0.8	2.4	2.5	0.6
They give no information	79.6	79.8	85.8	87.5
No. of Obs.	448	448	448	448

Source: CWIQ 2006 Ngorongoro DC