PMO-RALG

MASWA DC CWIQ
Survey on Poverty, Welfare and Services in Maswa DC

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

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

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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 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 percent of individuals of secondary school-age who had attended school at some point and was not attending school at the time of the survey.

Health

Need for Health Facilities	An individual is classed as having experienced need for a health facility if he/she had suffered from a self-diagnosed illness in the four weeks preceding the survey.
Use of Health Facilities	An individual is classed as having used a health facility if he/she had consulted a health professional in the four weeks preceding the survey.
Satisfaction with Health Facilities	No problems cited with health facility used in the four weeks preceding the survey.
Vaccinations	BCG: Anti-tuberculosis DPT: Diphtheria, Pertussis3, Tetanus OPV: Oral Polio Vaccination
Stunting	Occurs when an individual's height is substantially below the average height in his/her age-group.
Wasting	Occurs when an individual's weight is substantially below the average weight for his/her height category.
Orphan	A child is considered an orphan when he/she has lost at least one parent and is under 18 years.
Foster child	A child is considered foster if neither his/her parents reside in the household

Employment

Working Individual	An individual who had been engaged in any type of work in the 4 weeks preceding the survey.
Underemployed Individual	An individual who was ready to take on more work at the time of the survey.
Non-working Individual	An individual who had not been involved in any type of work in the 4 weeks preceding the survey.
Unemployed Individual	An individual who had not been engaged in any type of work in the 4 weeks prior to the survey but had been actively looking for it.
Economically Inactive Individual	An individual who had not been engaged in any type of work in the 4 weeks prior to the survey due to reasons unrelated to availability of work (e.g. Illness, old age, disability).
Household duties	Household tasks (cleaning, cooking, fetching firewood, water, etc.) that do not entail payment
Household worker	A household worker performs household duties but received payment.
Household as employer	A person is said to be employed by his/her household if he/she does domestic/household work for the household they live in (e.g. a housewife or a child that works on his/her parents' fields or shop). It does not include people whose main job was domestic work for other households (private sector).

Welfare

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

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Generic Core Welfare Indicators (2006)						
	Total	*Margin of error**	*Accessible*	*Remote*	*Poor*	*Non-poor*
Household characteristics						
Dependency ratio	1.1	0.1	1.1	1.2	1.5	1.0
Head is male	79.2	1.8	77.2	81.9	80.5	78.6
Head is female	20.8	1.9	22.8	18.1	19.5	21.4
Head is monagamous	52.1	1.8	52.4	51.8	55.2	50.9
Head is polygamous	24.5	1.7	21.3	28.9	24.7	24.4
Head is not married	23.4	1.9	26.3	19.3	20.1	24.7
Household welfare						
Household economic situation compared to one year ago						
Worse now	48.1	2.9	42.6	55.8	50.2	47.2
Better now	25.3	2.2	29.3	19.6	16.5	29.0
Neighborhood crime/security situation compared to one year ago						
Worse now	8.7	1.6	10.2	6.6	9.2	8.4
Better now	38.6	3.8	36.0	42.1	36.8	39.3
Difficulty satisfying household needs						
Food	60.4	3.6	60.8	60.0	82.5	51.1
School fees	2.3	0.8	2.7	1.9	2.5	2.3
House rent	0.8	0.8	1.3	0.0	0.0	1.1
Utility bills	0.1	0.1	0.0	0.2	0.0	0.1
Health care	25.7	2.2	25.7	25.6	29.7	24.0
Agriculture						
Land owned compared to one year ago						
Less now	3.1	0.9	4.5	1.1	5.1	2.2
More now	3.5	0.8	4.7	1.9	3.0	3.8
Cattle owned compared to one year ago						
Less now	24.4	3.0	23.5	25.5	22.5	25.2
More now	10.4	1.4	8.5	13.0	8.3	11.2
Use of agricultural inputs						
Yes	73.5	2.9	66.7	82.9	61.5	78.5
Fertilizers	60.5	3.4	59.5	61.7	63.2	59.7
Improved seedlings	65.1	3.3	61.7	68.8	55.9	68.1
Fingerlings	0.0	0.0	0.0	0.0	0.0	0.0
Hooks and nets	0.0	0.0	0.0	0.0	0.0	0.0
Insecticides	59.3	3.1	63.5	54.7	52.0	61.7
Other	0.0	0.0	0.0	0.0	0.0	0.0
Household infrastructure						
Secure housing tenure	1.9	1.5	3.0	0.6	1.3	2.2
Access to water	78.9	3.0	84.2	71.6	77.7	79.4
Safe water source	47.5	7.1	46.9	48.3	39.5	50.8
Safe sanitation	2.9	2.3	5.0	0.0	1.3	3.6
Improved waste disposal	19.5	4.2	14.4	26.5	14.2	21.8
Non-wood fuel used for cooking	0.0	0.0	0.0	0.0	0.0	0.0
Ownership of IT/Telecommunications Equipment						
Fixed line phone	0.0	0.0	0.0	0.0	0.0	0.0
Mobile phone	11.3	3.5	14.3	7.1	1.8	15.3
Radio set	48.4	4.3	52.4	42.8	20.9	60.0
Television set	2.1	1.5	3.6	0.0	0.0	3.0

	Total	Margin of error*	Accessible	Remote	Poor	Non-poor
Employment						
Employer in the main job						
Civil service	1.9	0.7	2.7	0.8	0.0	2.8
Other public serve	0.0	0.0	0.0	0.0	0.0	0.0
Parastatal	0.0	0.0	0.0	0.0	0.0	0.0
NGO	0.1	0.1	0.2	0.0	0.0	0.2
Private sector formal	1.3	0.7	2.1	0.3	0.2	1.9
Private sector informal	36.1	0.9	35.0	37.7	36.2	36.1
Household	55.8	1.1	54.9	57.1	60.0	53.7
Activity in the main job						
Agriculture	83.9	2.1	82.3	86.2	90.8	80.5
Mining/quarrying	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.2	0.1	0.2	0.1	0.0	0.3
Services	0.3	0.1	0.3	0.2	0.4	0.2
Employment Status in last 7 days						
Unemployed (age 15-24)	0.0	0.0	0.0	0.0	0.0	0.0
Male	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
Unemployed (age 15 and above))	0.0	0.0	0.0	0.0	0.0	0.0
Male	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
Underemployed (age 15 and above)	30.2	2.0	33.5	25.7	33.4	28.6
Male	35.6	2.7	41.9	26.8	36.5	35.1
Female	25.1	2.1	25.5	24.6	30.3	22.6
Education						
Adult literacy rate						
Total	60.2	3.1	61.2	58.8	53.1	63.8
Male	70.6	2.7	70.2	71.2	64.7	73.7
Female	50.4	4.0	52.7	47.2	41.9	54.7
Youth literacy rate (age 15-24)						
Total	83.4	2.9	85.5	80.4	83.1	83.5
Male	87.5	2.6	89.9	84.1	89.8	86.1
Female	79.1	3.8	80.9	76.2	75.0	81.0
Primary school						
Access to School	48.8	5.9	49.6	47.8	42.3	54.2
Primary Gross Enrollment	110.1	3.6	110.0	110.2	105.3	114.1
Male	113.2	4.6	111.3	115.4	110.4	115.4
Female	106.9	4.4	108.6	105.1	100.3	112.7
Primary Net Enrollment	77.9	2.7	74.3	82.0	72.9	82.2
Male	76.0	3.4	70.9	82.1	71.8	79.5
Female	79.8	2.9	77.9	81.9	73.9	84.9
Satisfaction	48.1	2.2	43.2	53.6	50.6	46.1
Primary completion rate	9.8	1.6	12.4	7.0	8.6	10.9

	Total	Margin of error*	Accessible	Remote	Poor	Non-poor
Secondary school						
Access to School	20.1	5.2	26.1	11.3	11.9	26.1
Secondary Gross Enrollment	12.9	4.1	14.5	10.7	5.8	18.1
Male	13.5	3.9	14.1	12.5	8.4	17.6
Female	12.4	5.2	14.8	8.9	2.8	18.6
Secondary Net Enrollment	8.0	2.6	8.6	7.0	5.0	10.1
Male	6.5	2.5	7.5	5.1	6.9	6.3
Female	9.5	3.4	9.9	8.9	2.8	13.8
Satisfaction	27.6	13.1	13.3	55.9	29.7	27.1
Secondary completion rate	0.0	0.0	0.0	0.0	0.0	0.0
Medical services						
Health access	21.2	5.6	26.1	14.8	17.5	23.6
Need	21.2	0.9	21.3	21.1	20.1	22.0
Use	23.5	1.1	24.0	22.9	21.8	24.6
Satisfaction	64.4	3.1	65.0	63.6	67.1	62.9
Consulted traditional healer	13.1	1.7	14.5	11.1	17.8	10.4
Pre-natal care	97.8	1.8	97.3	98.6	100.0	96.5
Anti-malaria measures used	74.3	3.5	79.0	67.8	59.9	80.4
Person has physical/mental challenge	0.5	0.2	0.6	0.5	0.8	0.4
Child welfare and health						
Orphanhood (children under 18)						
Both parents dead	1.1	0.3	1.4	0.7	1.3	0.9
Father only	5.2	0.9	6.2	3.9	6.7	4.0
Mother only	1.9	0.5	2.1	1.7	2.1	1.8
Fostering (children under 18)						
Both parents absent	13.8	1.4	14.0	13.7	9.9	17.0
Father only absent	11.2	1.6	12.7	9.3	16.5	6.9
Mother only absent	3.2	0.6	3.2	3.3	3.8	2.8
Children under 5						
Delivery by health professionals	55.3	3.9	58.0	51.2	49.8	59.4
Measles immunization	67.2	3.4	68.5	65.3	62.9	70.4
Fully vaccinated	26.2	2.4	26.9	25.1	23.2	28.4
Not vaccinated	19.9	2.8	16.2	25.6	23.4	17.4
Stunted	23.2	2.9	22.1	24.9	28.5	18.9
Wasted	1.8	0.6	1.5	2.3	3.9	0.2
Underweight	15.7	2.2	15.4	16.1	21.0	11.5

** 1.96 standard deviations*

	2004	2007	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Net Enrolment Rate							
Primary School	79.8	77.9	-1.9	3.8		-9.5	5.6
Secondary School	9.8	8.0	-1.8	4.2		-10.2	6.6
Rate of Dissatisfaction with School	66.6	54.0	-12.6	7.1	*	-26.4	2.0
Reasons for Dissatisfaction							
Books/Supplies	51.8	61.4	9.6	9.3		-9.1	28.2
Poor Teaching	3.3	15.5	12.2	3.0	***	6.0	18.1
Lack of Teachers	48.0	53.7	5.7	8.6		-11.4	22.8
Bad Condition of Facilities	26.9	44.0	17.1	7.3	**	2.6	31.7
Overcrowding	13.7	17.4	3.7	5.9		-8.2	15.4
Health Facility Consulted							
Private hospital	3.3	10.4	7.1	2.1	***	2.8	11.4
Government hospital	58.7	41.9	-16.8	5.2	***	-27.2	-6.4
Traditional healer	6.7	13.1	6.4	2.4	***	1.6	11.1
Pharmacy	7.3	31.4	24.1	3.0	***	18.5	30.5
Rate of Dissatisfaction with Health Facilities	33.5	35.6	2.1	5.8		-9.4	13.9
Reasons for Dissatisfaction							
Long wait	47.4	42.4	-5.0	11.6		-28.2	18.2
rtage of trained professionals	27.7	15.6	-12.1	5.2	**	-22.6	-1.6
Cost	37.8	30.7	-7.1	7.6		-22.3	8.0
No drugs available	33.2	26.3	-6.9	7.7		-22.2	8.5
Unsuccessful treatment	23.9	19.4	-4.5	5.1		-14.7	5.7
Water and Sanitation							
Piped water	14.1	4.2	-9.9	9.1		-28.3	8.2
Protected well	42.7	46.7	4.0	9.1		-14.2	22.1
No toilet	5.5	39.7	34.2	4.0	***	26.2	42.3
Flush toilet	0.1	2.9	2.8	2.2		-1.7	7.3
Covered pit latrine	85.3	51.2	-34.1	5.0	***	-44.2	-24.2
Uncovered pit latrine	9.0	6.2	-2.8	2.9		-8.6	2.9

	2004	2007	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Child Delivery							
Hospital or Maternity Ward	87.8	49.6	-38.2	5.9	***	-50.0	-26.4
Delivery Assistance							
Doctor/Nurse/Midwife	68.0	51.1	-16.9	6.8	**	-30.6	-3.2
TBA	21.9	14.6	-7.3	5.5		-18.4	3.8
Self-assistance	10.1	33.4	23.3	5.0	***	13.3	33.3
Child Nutrition							
Stunted	31.3	23.2	-8.1	4.1	**	-16.3	0.0
Severely Stunted	13.3	5.6	-7.7	2.6	***	-12.9	-2.6
Wasted	5.7	3.4	-2.3	1.4	*	-5.4	0.2
Severely Wasted	0.9	1.0	0.1	0.6		-1.2	1.4

1 INTRODUCTION

1.1 The Maswa District CWIQ

This report presents district level analysis of data collected in the Maswa 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 Maswa 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, Bunda DC, Dodoma MC, Hanang DC, Karagwe DC, Kasulu DC, Kibondo DC, Kigoma DC, Kilosa DC, Kishapu DC, Korogwe DC, Kyela DC, Ludewa DC, Makete DC, Meatu DC, Kahama DC, Mbulu DC, Morogoro DC, Mpwapwa DC, Muheza DC, Musoma DC, Ngara DC, Ngorongoro DC, Njombe DC, Rufiji DC, Shinyanga MC, Singida DC, Songea DC, Sumbawanga DC, Tanga MC, Temeke MC. Other African countries that have implemented nationally representative CWIQ surveys include Malawi, Ghana and Nigeria.

1.2 Sampling

The Maswa District CWIQ was sampled

Table 1.1 Variables Used to Predict Consumption Expenditure in Shinyanga Region

Basic Variables	***Household Assets***
Age of the household head	Ownership of a radio
Household size	Ownership of a bicycle
Level of education of the household head	Ownership of an iron
Main source of income	Ownership of a motor vehicle
Main activity of the household head	Ownership of a watch or clock
	Ownership of a wheelbarrow
Household Amenities	Ownership of a bed or matress
People per room	Ownership of a sewing machine
Meat consumption	Main material on the floor
Problems satisfying food needs	Main material on the roof
Type of toilet	Main material on the walls
Number of meals per day	
Fuel used for cooking	***Village Level Variables***
Distance to market	% of households with a bank account
Distance to public transport	
Distance to primary school	
Distance to secondary school	
Distance to hospital	

Source: HBS 2000/2001 for Shinyanga Region

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

A 10-page interview was conducted in each of the sampled households by an experienced interviewer trained by EDI. The respondent was the most informed person in the household, as identified by the members of the household. A weight and height measurement was taken by the interviewers for each individual under the age of 5 (60 months) in the surveyed households.

Finally, 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 Maswa 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

Table 1.3: Cluster Location

	Median Time (in minutes) to:				
	District Capital	All-Weather Road	Public Transport	Poverty Rate	Estimated Number of Households
Cluster Location					
Remote	60.0	60.0	240.0	33.8	14,805
Accessible	30.0	30.0	180.0	26.1	16,995

Source: CWIQ 2006 Maswa DC

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

	Poverty Rate	Percentage Living in	
		Remote Clusters	Accessible Clusters
Socio-Economic Group			
Employees	3.9	88.7	11.3
Self-Employed Agriculture	31.8	49.3	50.7
Self-Employed Other	9.1	82.8	17.2
Other	46.1	47.6	52.4

Source: CWIQ 2006 Maswa DC

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

Once the consumption level of a household has been predicted, it is compared to the Basic Needs Poverty Line set by National Bureau of Statistics (NBS) on the basis of the 2000/01 HBS. The Basic Needs Poverty Line is defined by what a household, using the food basket of the poorest 50 percent of the population, needs to consume to satisfy its basic food needs to attain 2,200 Kcal/day per adult equivalent. The share of non-food expenditures of the poorest 25 percent of households is then added. With this procedure, the Basic Needs Poverty Line is set at TZS 7,253 per 28 days per adult equivalent unit in 2000/01 prices. Households consuming less than this are assumed to be unable to satisfy their basic food and non-food needs1.

The Maswa 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
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 8.0 percent of the cases, and vice versa in 12.9 percent of the households. This gives an overall percentage of correct predictions of 79.1 percent.

When the model is applied to the CWIQ 2007 data for Maswa DC, the share of households living in poverty is 30 percent, consistent with the 31 percent of poverty obtained with the HBS. However, it must be kept in mind that the aim of the model is not estimating poverty rates, but

[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*'.

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

	Male	Female	Total
Socio-economic Group			
Employees	72.5	27.5	100.0
Self-Employed Agriculture	80.3	19.7	100.0
Self-Employed Other	77.5	22.5	100.0
Other	71.5	28.5	100.0
Total	79.2	20.8	100.0

Source: CWIQ 2006 Maswa DC

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 trends. The Maswa CWIQ, on the other hand, is sufficiently large to allow detailed district-level analysis. The accuracy with which households can be classified by poverty status using the CWIQ gives credence to the use of predicted poverty level as a variable throughout this report.

1.3.2 Cluster Location

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

Table 1.3 shows that the poverty rate differs substantially by cluster location, with remote villages reporting a rate of 34 percent, against 26 percent of accessible 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 unemployed, unpaid, inactive, or a household worker, at a rate of 46 percent. In turn, poverty is lowest for households where the main income earner is an employee at 4 percent. In addition, households from the latter group are the most likely to be located in remote villages, at 89 percent, whereas the self-employed in agriculture and the 'other' group are the most likely to be located in accessible villages, at 51 and 52 percent.

The socio-economic group of the household by gender of the household head is shown in Table 1.5. Roughly 4 out of 5 households are headed by a male. The share of female-headed households is highest for the 'other' and 'employee' categories at 29 and 28 percent, respectively, and lowest for the self-employed in agriculture at 20 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 89 percent of the household heads is dedicated. Employees are mostly dedicated to mining, manufacturing, energy or construction, with a share of 85 percent. The self-employed in non-agricultural activities are mostly dedicated to services (82 percent). The 'other' category is mostly dedicated to agriculture, at 83 percent.

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

	Agriculture	Mining Manufacturing Energy Construction	Private and Public Services	Household Duties	Other	Total
Socio-economic Group						
Employees	15.0	85.0	0.0	0.0	0.0	100.0
Self-Employed Agriculture	98.5	0.0	0.8	0.7	0.0	100.0
Self-Employed Other	17.6	0.0	82.4	0.0	0.0	100.0
Other	82.8	0.0	17.2	0.0	0.0	100.0
Total	88.6	5.1	5.7	0.6	0.0	100.0

Source: CWIQ 2006 Maswa DC

1 Introduction

2 VILLAGE, POPULATION AND HOUSEHOLD CHARACTERISTICS

2.1 Introduction

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

2.2 Main Population Characteristics

Table 2.1 shows the percent distribution of the population by cluster location and poverty status, by gender and age. Overall, the district's population is young. For instance, 6 percent of the population is 60 years old or over, whereas 49 percent is under 15 years old. The remaining 45 percent is between 15 and 59 years old. There are no strong differences by cluster location, but poor households have a higher share in the 0-14 group and lower shares in the remaining groups 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 mean dependency ratio is 1.1, meaning that on average one adult has to take care of more than 1 person. The breakdown by cluster location does not show strong differences. However, the breakdown by poverty status shows that poor households have a higher dependency ratio than non-poor households, at 1.5 and 1.0 respectively.

The dependency ratio increases with the number of household members, from 0.5 for households with 1 or 2 members, to 1.4 for households with 7 or more members. The breakdown by socio-economic group of the household shows that the 'other' group has the highest dependency ratio (1.1), whereas the employees have the lowest ratio (0.8)

The breakdown by gender of the household head shows that the dependency ratio in male-headed households is slightly higher than in female-headed households, at 1.2 and 1.0, respectively.

Table 2.3 shows the percent distribution of households by number of household members. The mean household size is 5.7 individuals. Households with at most two individuals only represent 12 percent of all households in the district. The figure for households with 7 or more members is 39 percent.

The breakdown by cluster location shows

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	24.1	21.7	2.8	48.7	25.3	23.1	3.0	51.3	49.4	44.8	5.8	100.0
Cluster Location												
Accessible	23.8	22.6	2.5	48.9	24.6	23.6	2.8	51.1	48.5	46.2	5.3	100.0
Remote	24.5	20.6	3.2	48.3	26.1	22.4	3.1	51.7	50.6	43.0	6.3	100.0
Poverty Status												
Poor	27.1	19.4	2.2	48.7	29.0	20.1	2.3	51.3	56.1	39.5	4.4	100.0
Non-poor	22.3	23.2	3.2	48.7	22.9	25.1	3.4	51.3	45.1	48.3	6.6	100.0

Source:CWIQ 2007 Maswa DC

Table 2.2: Dependency ratio

	0-4 years	5-14 years	0-14 years	15-64 years	65+ years	Total	Dependency ratio
Total	1.0	1.8	2.8	2.7	0.2	5.7	1.1
Cluster Location							
Accessible	1.0	1.7	2.7	2.7	0.2	5.6	1.1
Remote	0.9	2.0	3.0	2.6	0.2	5.8	1.2
Poverty Status							
Poor	1.4	2.8	4.2	3.1	0.2	7.5	1.5
Non-poor	0.8	1.4	2.2	2.5	0.2	5.0	1.0
Household size							
1-2	0.0	0.1	0.1	1.2	0.4	1.7	0.5
3-4	0.8	0.5	1.3	2.1	0.2	3.6	0.7
5-6	0.8	1.8	2.7	2.5	0.2	5.4	1.1
7+	1.5	3.2	4.7	3.5	0.2	8.5	1.4
Socio-economic Group							
Employee	0.9	1.7	2.6	3.4	0.0	6.0	0.8
Self-employed - agriculture	1.0	1.8	2.8	2.6	0.3	5.6	1.2
Self-employed - other	1.1	1.5	2.6	2.9	0.0	5.5	0.9
Other	1.0	2.2	3.2	3.2	0.3	6.7	1.1
Gender of Household Head							
Male	1.1	2.0	3.0	2.8	0.2	6.0	1.2
Female	0.6	1.3	2.0	2.3	0.3	4.5	1.0

Source:CWIQ 2007 Maswa DC

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

	1-2 persons	3-4 persons	5-6 persons	7+ persons	Total	household size
Total	11.5	25.6	23.8	39.1	100.0	5.7
Cluster Location						
Accessible	11.0	28.2	22.6	38.1	100.0	5.6
Remote	12.2	21.9	25.5	40.4	100.0	5.8
Poverty Status						
Poor	0.0	9.4	20.2	70.4	100.0	7.5
Non-poor	16.4	32.4	25.3	25.9	100.0	5.0
Socio-economic Group						
Employee	7.0	33.4	19.6	40.0	100.0	6.0
Self-employed - agriculture	12.3	23.3	26.0	38.3	100.0	5.6
Self-employed - other	11.6	45.7	8.3	34.4	100.0	5.5
Other	4.9	28.4	12.7	53.9	100.0	6.7
Gender of Household Head						
Male	7.3	24.6	25.2	42.8	100.0	6.0
Female	27.5	29.1	18.5	24.9	100.0	4.5

Source:CWIQ 2007 Maswa DC

that households in remote villages tend to be larger than households in accessible villages, with means of 5.8 and 5.6 members, respectively. The difference by poverty status is more pronounced, with poor households reporting a mean household size of 7.5 members, and non-poor households reporting 5.0 members on average.

Regarding socio-economic groups, the 'other' category has the highest mean household size, at 6.7, while the 'self-employed agriculture' socio-economic group has the lowest at 5.6 members. Finally, households headed by males are larger than female headed households: the former have 6.0 members in average, whereas the latter have only 4.5 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 when 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 clear that the category 'other relatives' is mostly

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

	Head	Spouse	Child	Parents	Other relative	Not related	Total
Total	17.5	13.6	51.4	1.0	15.5	1.0	100.0
Cluster Location							
Accessible	17.8	13.3	51.0	1.0	15.8	1.2	100.0
Remote	17.2	14.0	52.0	1.0	15.1	0.7	100.0
Poverty Status							
Poor	13.4	10.7	57.4	0.9	16.2	1.5	100.0
Non-poor	20.1	15.5	47.6	1.0	15.1	0.7	100.0
Age							
0- 9	0.0	0.0	75.5	0.0	23.7	0.7	100.0
10-19	0.0	0.6	77.0	0.0	22.0	0.5	100.0
20-29	9.0	33.9	41.3	0.0	12.6	3.1	100.0
30-39	40.8	43.4	12.0	0.0	2.1	1.7	100.0
40-49	63.1	35.7	1.2	0.0	0.0	0.0	100.0
50-59	62.9	30.2	1.1	3.8	2.0	0.0	100.0
60 and above	69.0	13.1	0.0	13.9	1.7	2.4	100.0
Gender							
Male	28.5	0.3	55.7	0.1	14.5	0.9	100.0
Female	7.1	26.2	47.3	1.8	16.4	1.2	100.0

Source:CWIQ 2007 Maswa DC

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

	Never married	Married monog	Married polyg	Informal, loose union	Divorced	Separated	Widowed	Total
Total	39.6	34.4	14.4	0.7	0.0	5.3	5.7	100.0
Cluster Location								
Accessible	40.3	35.0	12.4	0.6	0.0	5.8	5.8	100.0
Remote	38.7	33.5	17.2	0.7	0.0	4.5	5.5	100.0
Poverty Status								
Poor	46.2	29.5	12.2	0.0	0.0	6.6	5.5	100.0
Non-poor	36.0	37.1	15.6	1.0	0.0	4.5	5.8	100.0
Age								
12-14	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
15-19	92.7	5.7	0.5	0.3	0.0	0.8	0.0	100.0
20-24	53.5	29.3	8.0	0.6	0.0	8.7	0.0	100.0
25-29	15.0	64.2	14.2	3.6	0.0	3.1	0.0	100.0
30-39	4.0	56.7	26.4	1.0	0.0	10.0	1.9	100.0
40-49	0.2	54.4	31.1	0.7	0.0	7.6	6.0	100.0
50-59	0.7	48.4	27.6	0.0	0.0	8.3	15.0	100.0
60 and above	0.0	45.1	14.2	0.0	0.0	5.6	35.1	100.0
Gender								
Male	45.4	35.5	14.8	0.7	0.0	2.9	0.8	100.0
Female	34.2	33.4	14.1	0.6	0.0	7.5	10.3	100.0

Source:CWIQ 2007 Maswa DC

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

	Employee	Self-employed Agriculture	Self-employed Other	Other	Total
Total	1.7	21.8	1.8	74.7	100.0
Cluster Location					
Accessible	2.6	21.6	2.4	73.4	100.0
Remote	0.6	22.0	1.1	76.3	100.0
Poverty Status					
Poor	0.2	19.7	0.9	79.2	100.0
Non-poor	2.6	23.1	2.4	71.9	100.0
Age					
5- 9	0.0	0.0	0.0	100.0	100.0
10-14	0.0	1.3	0.0	98.7	100.0
15-19	0.0	5.9	0.6	93.5	100.0
20-29	3.4	17.4	1.9	77.3	100.0
30-39	3.4	37.9	3.8	54.8	100.0
40-49	5.6	57.7	4.1	32.6	100.0
50-59	4.7	57.6	6.1	31.6	100.0
60 and above	0.0	65.8	3.5	30.7	100.0
Gender					
Male	2.0	33.5	2.5	62.1	100.0
Female	1.4	10.5	1.2	86.9	100.0

Source:CWIQ 2007 Maswa DC

comprised by children under 19 years old. This highlights the importance of the analysis of fostering and orphan status. After the age of 29, most of the population is either head of their own household or spouse to the head of the household.

The gender breakdown shows that males are more likely to be household heads than females, with shares of 29 and 7 percent, respectively. In turn, females are more likely to be spouses to the household head than males at rates of 26 and less than 1 percent, respectively.

Table 2.5 shows the percent distribution of the population age 12 and above by marital status. Overall, 40 percent of the population has never been married. In addition, 34 percent is married and monogamous, and 14 percent is married and polygamous. Despite virtually nobody in the district being 'officially' divorced, 5 percent of the population is 'unofficially' separated. Informal unions constitute 1 percent of the population and 6 percent is widowed.

There are no strong differences in marital status by cluster location. However, the breakdown by poverty status shows that members of poor households are more likely to have never been married, whereas members of non-poor households are more likely to be in a monogamous marriage.

The age breakdown shows that the 'polygamous-married' category peaks for the 40-49 group, at 31 percent. For the population after 25 years old, married-monogamous is the most common category. 'Separated' and 'widowed' show higher shares for the older cohorts. 'Never married' also shows correlation with age, decreasing rapidly as the population gets older.

Around 45 percent of the men have never been married, but for women the figure is only 34 percent. While 10 percent of women are widowed and 8 percent separated, the shares for males are 1 and 3 percent, respectively.

Table 2.6 shows the percent distribution of the population age 5 and above by socio-economic group. Overall, 22 percent of the population is self-employed in agriculture, with 75 percent in other activities. No strong differences are observed between accessible and remote clusters. The breakdown by poverty status shows that poor households have a higher share in the 'other' category (unemployed, inactive unpaid or household workers) than the non-poor households at 79 and 72 percent respectively.

The analysis of the age-groups is particularly interesting. The share of employees peaks at 6 percent for the 40-49

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	34.3	3.0	33.2	24.4	2.9	0.0	2.2	100.0
Cluster Location								
Accessible	34.2	2.7	31.7	24.9	3.6	0.0	2.8	100.0
Remote	34.3	3.4	35.1	23.8	2.0	0.0	1.3	100.0
Poverty Status								
Poor	39.0	2.6	37.5	19.5	1.3	0.0	0.2	100.0
Non-poor	31.4	3.2	30.6	27.4	4.0	0.0	3.4	100.0
Age								
5- 9	68.4	12.5	19.2	0.0	0.0	0.0	0.0	100.0
10-14	7.1	2.7	89.0	1.2	0.0	0.0	0.0	100.0
15-19	9.6	0.0	45.6	36.1	8.7	0.0	0.0	100.0
20-29	17.0	0.2	13.0	56.2	9.8	0.0	3.7	100.0
30-39	24.6	0.0	12.5	56.8	2.4	0.0	3.7	100.0
40-49	37.2	0.0	14.6	40.1	2.7	0.0	5.4	100.0
50-59	62.8	0.0	15.8	13.5	0.0	0.0	7.9	100.0
60 and above	80.9	0.0	12.8	3.2	0.0	0.0	3.1	100.0
Gender								
Male	29.4	3.0	35.9	26.0	3.4	0.0	2.3	100.0
Female	39.0	2.9	30.6	22.9	2.5	0.0	2.1	100.0

Source:CWIQ 2007 Maswa DC

cohort. The share for self-employed other tends to increase with age, peaking for 50-59 cohort at 6 percent. The share of self-employed in agriculture also tends to increase with age, peaking at 66 percent for the 60+ cohort. On the contrary, the category 'other' tends to decrease with age, showing a sharp decrease between 20-29 and 30-39, from 77 to 55 percent, then decreases steadily until 31 percent for the 60+ cohort.

The gender breakdown shows that males are more likely to be self-employed in agriculture than females. In turn, females are more likely to be in the 'other' category, with a share of 87 percent against 62 percent for the males.

Table 2.7 shows the percent distribution of the population aged 5 and above by highest level of education. Roughly 34 percent of the population has no education, 33 percent has some primary, and 24 percent has completed primary. The remaining levels have shares of at most 3 percent each.

The breakdown by cluster location shows no strong correlation with the education level of the households aged 5 and above. The breakdown by poverty status shows that poor households report a higher share of population with no education or with just some primary than non-poor households. In turn the latter report a higher share with completed primary than the former.

The age breakdown shows that 68 percent of the children between 5 and 9 have no formal education, but 90 percent of the children 10-14 have some or complete primary. Rates of no education are lowest for the population in the 15-19 cohorts (10 percent) and higher for the older groups. In the groups between 20 and 49 years old, the most common is completed primary.

The gender breakdown shows that females have a higher share of uneducated population than males: 39 against 29 percent, but at the same time similar shares with complete primary. The share of males reporting some primary is higher than that of females (36 and 21 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 monogamous, 21 percent divorced, separated or widowed, 25 percent married and polygamous, 1 percent has never been married and a

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	1.1	52.1	24.5	0.8	21.4	100.0
Cluster Location						
Accessible	1.8	52.4	21.3	1.1	23.5	100.0
Remote	0.3	51.8	28.9	0.5	18.5	100.0
Poverty Status						
Poor	0.6	55.2	24.7	0.0	19.5	100.0
Non-poor	1.4	50.9	24.4	1.2	22.2	100.0
Age						
15-19	0.0	0.0	0.0	0.0	0.0	0.0
20-29	8.5	68.6	19.4	3.5	0.0	100.0
30-39	2.6	58.3	26.0	2.5	10.5	100.0
40-49	0.0	53.9	25.6	0.0	20.5	100.0
50-59	0.0	41.9	30.9	0.0	27.2	100.0
60 and above	0.0	47.1	17.5	0.0	35.4	100.0
Gender						
Male	0.5	65.4	30.5	0.7	2.8	100.0
Female	3.7	1.5	1.4	1.4	92.0	100.0

Source:CWIQ 2007 Maswa DC

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

	Employed	Self-employed Agriculture	Self-employed Other	Other	Total
Total	5.5	82.6	6.1	5.8	100.0
Cluster Location					
Accessible	8.1	79.6	8.3	4.0	100.0
Remote	1.9	86.6	3.2	8.3	100.0
Poverty Status					
Poor	0.7	88.4	1.9	9.0	100.0
Non-poor	7.5	80.1	7.9	4.4	100.0
Age					
15-19	0.0	0.0	0.0	0.0	0.0
20-29	7.0	79.3	13.7	0.0	100.0
30-39	5.8	82.3	8.7	3.2	100.0
40-49	9.6	76.2	6.5	7.7	100.0
50-59	5.3	84.2	5.5	5.0	100.0
60 and above	0.0	90.1	1.5	8.4	100.0
Gender					
Male	5.0	83.7	6.0	5.2	100.0
Female	7.3	78.1	6.6	7.9	100.0

Source:CWIQ 2007 Maswa DC

further 1 percent lives in an informal union.

The breakdown by cluster location shows that remote villages report a higher share of married polygamous household heads than accessible villages. Both clusters report similar shares with other types of marital status. Regarding poverty status, heads of poor households are more likely to be in a monogamous marriage than non-poor households.

The breakdown by age-group shows that the 'married-monogamous' category decreases with age, as 'married-polygamous' and 'divorced, separated or widowed' increase.

Most female household heads are divorced, separated or widowed (92 percent), whereas for males, this category roughly represents 3 percent. Most male household heads are married, monogamous or polygamous (64 and 31 percent, respectively).

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	39.1	15.4	37.2	1.9	0.0	6.5	100.0
Cluster Location							
Accessible	40.4	14.7	35.4	2.0	0.0	7.6	100.0
Remote	37.3	16.4	39.7	1.7	0.0	4.9	100.0
Poverty Status							
Poor	51.1	16.9	30.9	0.0	0.0	1.1	100.0
Non-poor	34.0	14.8	39.8	2.7	0.0	8.7	100.0
Age							
15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-29	12.6	21.8	53.1	5.5	0.0	7.0	100.0
30-39	18.3	10.2	64.8	2.4	0.0	4.3	100.0
40-49	23.4	15.2	49.3	3.4	0.0	8.6	100.0
50-59	59.3	17.2	15.0	0.0	0.0	8.5	100.0
60 and above	72.3	18.6	4.6	0.0	0.0	4.5	100.0
Gender							
Male	32.0	18.1	42.5	2.1	0.0	5.3	100.0
Female	66.2	5.2	16.8	1.1	0.0	10.8	100.0

Source:CWIQ 2007 Maswa DC

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 is not always the household head. As expected, the great majority of the district's household heads belongs to the self-employed in agriculture, with a share of 83 percent. The self-employed in non-agricultural activities represent 6 percent of the household heads, the 'other' category (unemployed, inactive and household workers) represents 6 percent as well, and the employees are a further 6 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 87 and 80 percent, respectively. In accessible villages, household heads are more likely to be in the 'self-employed other' group than heads of households in remote villages, with shares of 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 'self-employed other' group more often than the heads of poor households.

The breakdown by age of the household head shows interesting insights. For all age-groups, 'self-employed agriculture' is the most important category, representing at least 4 out of 5 household heads in each age-group. The 'employee' category peaks at 10 percent for the 40-49 age-groups. The 'self-employed other' is lower for the 50-59 and 60+ cohorts. The 'other' category gains importance in the 60+ age-group, with a share of 8 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. Both genders show similar shares with the remaining socio-economic groups.

Table 2.10 shows the percent distribution of the heads of household by highest level of education. Overall, around only 7 percent of the household heads has any education after secondary. 39 percent of the household heads has no education, 15 percent some primary and 37 percent has completed primary.

The breakdown by cluster location shows that household heads from remote villages are more likely to have completed primary than household heads from accessible villages. Poverty status is strongly correlated with the level of 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: household heads from poor households are more likely to have no education than heads from non-poor households, whereas the latter are more likely to have complete primary or post secondary studies than the former.

The age breakdown shows that 72 percent of household heads aged 60 or over has no education, and a further 19 percent just some primary. Completed primary represents almost 64 percent for the 30-39 age-group; but only 15 percent in the 50-59, and 5 percent for the 60+ cohort. In the latter groups, 'some primary' gains importance.

The analysis by gender shows that female household heads are more likely to have no education than males, with rates of 66 and 32 percent, respectively. Males report a higher share with some primary than females. Furthermore, 42 percent of the male household heads has completed primary, against 17 percent of females. In turn females report a higher share with post secondary than males at 11 and 5 percent respectively.

2.5 Orphan and Foster Status

Table 2.11 shows the percent distribution of children under 18 years old who have lost at least one parent. Overall, about 1 percent of children under 18 lost both parents, 2 percent lost only their mother and 5 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.

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	1.9	5.2	1.1
Cluster Location			
Accessible	2.1	6.2	1.4
Remote	1.7	3.9	0.7
Poverty Status			
Poor	2.1	6.7	1.3
Non-poor	1.8	4.0	0.9
Age			
0-4	0.4	1.7	0.6
5-9	1.5	5.4	0.5
10-14	2.9	7.6	1.2
15-17	4.4	8.3	3.5
Gender			
Male	2.0	4.7	1.3
Female	1.8	5.6	0.9

Source:CWIQ 2007 Maswa DC

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 16 percent of the children between 15 and 17 years lost at least one parent, and 12 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 28 percent of children under 18 were living in non-nuclear households at the time of the survey.

Children from accessible villages are more likely to live in non-nuclear households than children from remote villages. Similar observations are made with poverty status with children from poor households resembling children from accessible villages.

The analysis of age-groups shows that the share of children living in non-nuclear households tends to increase with age, but is lower and relatively constant for children living with their father only.

There appears to be no strong correlation between gender and foster status.

Table 2.12 - Foster status of children under 18 years old

	Children living with mother only	Children living with father only	Children living with no parents	Children living in non-nuclear households
Total	11.2	3.2	13.8	28.3
Cluster Location				
Accessible	12.7	3.2	14.0	29.9
Remote	9.3	3.3	13.7	26.2
Poverty Status				
Poor	16.5	3.8	9.9	30.1
Non-poor	6.9	2.8	17.0	26.8
Age				
0-4	13.5	0.8	5.3	19.5
5-9	8.4	2.7	19.5	30.6
10-14	10.5	4.9	16.3	31.7
15-17	13.4	6.9	16.7	37.1
Gender				
Male	9.8	3.3	13.8	26.9
Female	12.5	3.2	13.8	29.6

Source:CWIQ 2007 Maswa DC

2 Village, population and household characteristics

3 EDUCATION

This chapter examines selected education indicators in Maswa 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 rate[1] is 60 percent. There are no strong differences by cluster location, but the breakdown by poverty status shows that the rate is higher among non-poor households, at 64 percent, compared to poor households, at 53 percent.

The breakdown by socio-economic group of the household shows that the literacy rate is highest among the employees (94 percent) and lowest among the self-employed in agriculture (56 percent).

The gender breakdown shows an important literacy rate gap between men and women. The literacy rate among men is 21 percentage points higher than that of women at 71 percent and 50 percent respectively.

Orphaned children report a lower literacy rate than non-Orphaned children, at 73 and 89 percent, respectively. In contrast, there are no clear differences by foster status.

3.1.2 Primary School

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, 49 percent of primary school-age children have access to primary school. There are no differences in access to primary school by cluster location. The breakdown by poverty status, in turn, reveals that non-poor households report a higher access rate to primary school.

The breakdown by socio-economic group shows that the highest rate is shown by the employees, while the lowest is shown by the self-employed in agriculture.

Gender does not show a substantial correlation with the rate of access to primary school. However, the breakdown by orphan and foster status shows that orphaned and fostered children report lower rates of access to primary school than their counterparts.

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 are a large proportion of non-school-age individuals attending school, the GER may exceed 100 percent. Primary school GER informs on the ratio of all individuals in primary school to the population of individuals of primary school-age (7 to 13 years) 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

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

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

The primary school GER was 110 percent at the time of the survey. This figure indicates that all individuals who were at primary school constitute 110 percent of all children of primary school-age in the district. The NER further shows that 78 percent of all primary school-age children were attending school.

The GER does not differ by cluster location, but the NER is higher in remote clusters. In turn, the breakdown by poverty status shows that non-poor households report higher GER and NER than poor households.

GER and NER are highest for the employees at 125 and 94 percent respectively. On the other hand, the GER is lowest among the 'other' category at 103 percent, whereas the NER is lowest for the self-employed in agriculture at 76 percent.

Table 3.1: Education indicators

		Primary				Secondary			
	Adult Literacy rate	access	gross enrollment	net enrollment	satisfaction	access	gross enrollment	net enrollment	satisfaction
Total	60.2	48.8	110.1	77.9	48.1	8.0	12.9	8.0	27.6
Cluster Location									
Accessible	61.2	49.6	110.0	74.3	43.2	11.9	14.5	8.6	13.3
Remote	58.8	47.8	110.2	82.0	53.6	2.3	10.7	7.0	55.9
Poverty Status									
Poor	53.1	42.3	105.3	72.9	50.6	0.3	5.8	5.0	29.7
Non-poor	63.8	54.2	114.1	82.2	46.1	13.6	18.1	10.1	27.1
Socio-economic Group									
Employee	94.4	86.4	125.1	94.3	28.1	29.7	69.1	37.4	17.3
Self-employed - agriculture	56.2	44.3	109.8	75.6	50.5	6.3	7.7	4.9	41.2
Self-employed - other	74.6	74.6	109.2	79.2	14.9	16.4	19.0	9.5	0.0
Other	62.7	55.5	102.6	91.1	58.6	0.0	15.5	15.5	15.3
Gender									
Male	70.6	46.7	113.2	76.0	42.8	7.5	13.5	6.5	31.8
Female	50.4	50.8	106.9	79.8	53.7	8.5	12.4	9.5	22.8
Orphan status									
Orphaned	73.4	42.0	119.4	79.3	43.9	13.3	9.0	9.0	0.0
Not-orphaned	88.8	49.5	108.3	78.0	48.4	7.8	7.2	7.2	31.5
Foster status									
Fostered	84.1	43.8	90.6	70.4	46.2	8.0	4.5	4.5	0.0
Not-fostered	87.4	49.1	112.3	79.2	48.7	7.5	7.3	7.3	31.0

Source:CWIQ 2007 Maswa 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.

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	Facilties in bad condition	High fees	Other
Total	54.0	61.4	15.5	53.7	10.0	17.4	44.0	2.1	3.3
Cluster Location									
Accessible	60.6	69.3	14.0	49.5	14.1	16.8	42.5	3.0	4.4
Remote	46.0	48.9	17.7	60.2	3.6	18.2	46.5	0.8	1.7
Poverty Status									
Poor	50.9	63.4	18.3	45.9	7.6	21.5	42.2	1.8	1.8
Non-poor	56.2	60.1	13.7	58.6	11.6	14.7	45.2	2.3	4.3
Socio-economic Group									
Employee	74.8	72.4	15.0	46.4	13.9	25.2	41.5	11.1	0.0
Self-employed - agriculture	50.4	56.7	17.8	53.8	11.3	14.6	42.6	0.2	4.5
Self-employed - other	88.2	88.1	4.9	54.4	0.0	27.9	73.0	0.0	0.0
Other	44.5	61.3	0.0	66.3	0.0	22.7	24.5	13.3	0.0
Gender									
Male	59.0	62.2	14.6	59.7	9.6	16.9	42.8	2.9	4.6
Female	48.6	60.4	16.6	45.8	10.6	18.0	45.6	1.2	1.6
Type of school									
Primary	51.9	60.4	15.8	52.5	10.9	18.3	43.5	0.0	3.9
Government	51.9	60.4	15.8	52.6	10.9	18.3	43.5	0.0	3.9
Private	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Secondary	72.4	65.8	17.4	63.4	6.4	5.4	49.4	14.3	0.0
Government	70.0	56.6	22.1	60.3	8.1	6.9	49.2	18.1	0.0
Private	100.0	100.0	0.0	75.0	0.0	0.0	50.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	65.1	68.5	8.8	55.3	3.6	21.1	43.7	13.1	0.0
Government	64.7	77.5	9.9	56.7	4.1	23.9	48.0	3.1	0.0
Private	65.8	0.0	0.0	50.0	0.0	0.0	0.0	100.0	0.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0

Source:CWIQ 2007 Maswa DC

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

The breakdown by gender shows that while GER for males is 113 percent, the rate for females is 107 percent. However, gender does not show strong correlation with NER.

The breakdown by orphan status shows that GER for orphaned children is higher than that of non-orphaned children at 119 and 108 percent respectively, with no differences in NER. The breakdown by foster status shows that fostered children have a lower GER than non-fostered children at 91 and 112 percent respectively. Likewise, fostered children have a lower NER than non-fostered children at 70 and 79 percent respectively. It is worth remembering the small sample size in the orphaned and fostered category (see chapter 2), as well as that foster and orphan status is strongly correlated with age: orphaned and fostered children have higher mean ages than non-orphaned and non-fostered children.

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.

Almost half (48 percent) of all primary school pupils were satisfied with school. 43 percent of pupils living in accessible clusters are satisfied with school compared to 54 percent of pupils living in remote clusters. Likewise, while 73 percent of pupils living in poor households reported to be satisfied with school, the share for pupils living in non-poor households is 82 percent.

The breakdown by socio-economic group shows that households belonging to the 'self-employed agriculture' category have

the lowest rate of satisfaction with primary school at 15 percent, while the figure for pupils living in households belonging to the 'other' category is 59 percent.

The gender breakdown shows that females report a higher rate of satisfaction than males, while there are no strong differences in the rate of satisfaction with primary school by foster and orphan status.

3.1.3 Secondary School Access

The rate of access to secondary school 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 8 percent of all pupils in secondary school have access to secondary school. While the rate is 12 percent for accessible villages, the rate for remote villages is 2 percent. Similarly, while 14 percent of pupils living in non-poor households have access to secondary school, the share for pupils living in poor households is less than 1 percent.

The socio-economic status of the household seems to be strongly correlated with the rate of access to secondary school. While pupils from the 'other' category have the lowest rate of access to secondary school at 0 percent, the employees have the highest rate at 30 percent.

There are no strong differences in the access rate to secondary school by gender, orphan or foster status.

Enrolment

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

The GER and NER at secondary school are very low compared to primary school level. Overall, GER was 13 percent and NER was 8 percent. There are no stark differences by cluster location, but non-poor households report higher NER and GER than poor households.

The breakdown by socio-economic group of the household shows that the employees report the highest GER and NER at 69 and 37 percent, whereas the 'self-employed agriculture' category report the lowest rates at 8 and 5 percent respectively.

Once again, there are no strong differences by gender, orphan and foster status.

Satisfaction

28 percent of the population enrolled in secondary school is satisfied with school. The satisfaction rate is lower than in primary schools (48 percent). The satisfaction rate is higher for remote clusters than for accessible clusters, at 56 and 13 percent respectively. There are no strong differences in the satisfaction rate with secondary school by poverty status.

The breakdown by socio-economic group shows that 41 percent of pupils living in households belonging to the 'self-employed agriculture' category are satisfied with secondary school, while the share for those living in households where the main income earner belongs to the 'self-employed other' category is virtually null.

The secondary school satisfaction rate is higher among males than among females, at 32 and 23 percent respectively.

The breakdown by orphan status shows that non-orphaned children report a higher satisfaction rate than their counterparts. Similarly, non-fostered children report a higher rate of satisfaction with secondary school than fostered children, at 31 and 0 percent, respectively.

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 school 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, 54 percent of the students who were enrolled in either primary or secondary school reported dissatisfaction with school. 61 percent of students reported lack of books or supplies as the reason for dissatisfaction, followed by 54 percent reporting dissatisfaction due to lack of teachers and 44 percent reporting bad condition of the facilities. Lack of space and poor teaching were cited by 17 and 16 percent of the dissatisfied students, respectively.

The dissatisfaction rate for remote villages is 15 percentage points higher than that of accessible villages, at 61 and 46 percent respectively. The share dissatisfied by lack of books or supplies is higher among the former, while the share dissatisfied by lack of teachers is higher among the latter. Likewise, the dissatisfaction rate for non-poor households is higher than that of poor households at 56 and 51 percent respectively. Further breakdown of the data shows that the dissatisfaction rate due to lack of teachers among non-poor households at 59 percent, against and 46 percent of poor households.

The breakdown by socio-economic groups shows that the dissatisfaction rate among the self-employed in non-agricultural activities is the highest (88 percent). At the same time the 'other' category reported the lowest dissatisfaction rate (45 percent). It is also observed that 88 percent of the 'self-employed other' category, 72 percent of the employees, and 57 percent of the self-employed in agriculture reported dissatisfaction due to lack of teachers compared to 61 percent of households belonging to the 'other' category. In turn, the latter report a higher share dissatisfied by lack of teachers than the remaining categories.

The gender breakdown shows that males report a higher dissatisfaction rate than females, at 59 and 49 percent, respectively. Further breakdown of the data shows that 60 percent of males reported dissatisfaction due to lack of teachers compared to 46 percent of females.

Those attending primary school reported to be most dissatisfied due to lack of books or supplies (60 percent) followed by lack of teachers (53 percent). These are

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

		Reasons not currently attending										
	Percent not attending	Completed school	Distance	Cost	Work	Illness	Pregnancy	Got married	Useless/ uninteresting	Failed exam	Awaits admission	Dismissed
Total	15.4	21.4	0.0	19.2	26.0	5.0	1.9	9.2	12.0	49.8	7.0	0.0
Cluster Location												
Accessible	16.7	12.6	0.0	16.7	24.8	4.2	2.1	12.1	7.7	55.1	9.3	0.0
Remote	13.8	34.1	0.0	22.9	27.8	6.2	1.7	5.0	18.3	42.2	3.7	0.0
Poverty Status												
Poor	14.6	19.4	0.0	14.7	27.0	6.9	4.7	1.7	17.1	50.5	2.9	0.0
Non-poor	16.0	22.8	0.0	22.4	25.3	3.7	0.0	14.4	8.5	49.3	9.9	0.0
Socio-economic Group												
Employee	14.5	6.6	0.0	0.0	0.0	0.0	0.0	19.0	19.0	0.0	55.4	0.0
Self-employed - agric	14.6	23.0	0.0	17.7	21.8	5.4	0.9	8.6	12.7	50.5	4.6	0.0
Self-employed - other	18.2	0.0	0.0	61.7	84.3	15.7	22.6	19.6	0.0	61.7	0.0	0.0
Other	22.8	29.6	0.0	19.3	41.1	0.0	0.0	2.4	9.6	67.3	0.0	0.0
Gender												
Male	13.9	14.1	0.0	21.3	32.8	5.4	0.0	0.0	18.4	48.0	8.5	0.0
Female	16.9	27.6	0.0	17.4	20.4	4.7	3.6	16.9	6.6	51.4	5.8	0.0
Age												
7-13	0.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0	84.5	0.0	0.0	0.0
14-19	37.0	21.5	0.0	19.6	26.5	5.1	2.0	9.3	10.7	50.7	7.2	0.0

Source:CWIQ 2007 Maswa DC

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

the most cited reasons for dissatisfaction with secondary school as well, with rates of 66 and 63 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 15 percent of 7 to 19 year olds who were not attending school. Around 21 percent of the non-attending population did not attend because they had completed standard seven, O-level or A-level. 7 percent reported that they were awaiting admission and 50 percent said they had failed standard four, seven or form four exams. 12 percent of respondents reported that they were not attending school because they found it useless or uninteresting. While 19 percent were not attending due to cost, 26 percent were not attending due to work.

There are no strong differences in the shares of children not attending by cluster location or poverty status. However, remote clusters report higher shares of 'completed school', 'cost' and 'useless/uninteresting', while accessible villages report higher shares of 'got married' and 'failed exam'. Similarly, 22 percent of children living in non-poor households were not attending school because of the cost, while the share for poor households is 15 percent. A further 14 percent were not attending because they got married, while the share for poor households is 2 percent.

Furthermore, 23 percent of children from households where the main income earner belongs to the 'other' category do not attend school compared to 15 percent of the employees and the self-employed in agriculture. Further breakdown of the data shows that the self-employed in non-agricultural activities report the highest shares in cost, work, illness, pregnancy, and, together with the employees, marriage as causes for not attending school. The employees also show the highest shares reporting school as useless or uninteresting and awaiting admission, while the other category reports the highest share not attending because of having failed exams.

There are no strong differences in the shares of males and females not attending

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	76.0	79.8	77.9	0.3	0.1	0.2
7	33.0	35.2	34.2	0.0	0.0	0.0
8	47.6	61.6	53.6	0.0	0.0	0.0
9	74.5	92.7	84.7	0.0	0.0	0.0
10	92.1	91.5	91.8	0.0	0.0	0.0
11	90.6	88.8	89.9	0.0	0.0	0.0
12	98.2	93.7	95.6	0.0	0.0	0.0
13	96.0	94.3	95.3	1.9	1.1	1.6

Source:CWIQ 2007 Maswa DC

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

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

	Net enrollment rates			Drop out rates		
	Male	Female	Total	Male	Female	Total
Total	6.5	9.5	8.0	9.6	20.4	14.9
14	0.0	2.4	1.3	0.0	12.4	6.6
15	3.5	1.8	2.8	11.3	13.5	12.2
16	3.4	13.6	8.9	12.7	29.8	21.9
17	6.5	23.9	13.9	14.1	6.9	11.0
18	16.7	13.9	15.3	16.7	41.9	29.4
19	16.1	9.4	12.6	6.4	19.0	12.8

Source:CWIQ 2007 Maswa DC

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

school. However, the reasons vary. While females report having completed school or having gotten married more often than males, the latter report work and finding school useless more often than the former.

Almost all primary school-aged children attend school, as their non-attendance rate is 1 percent. On the other hand, the share for secondary school-age children is 37 percent. Most of the primary school-aged children that were not attending school reported finding it useless or uninteresting (85 percent). In turn, roughly half (51 percent) of the secondary school-age children who were not attending school reported having failed exams as the cause for not attending.

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, the 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 nearly 0 percent, with only the 13 year olds showing a positive drop-out rate (2 percent). Therefore, only enrolment rates will be analysed.

Overall, 78 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), 76 percent of boys and 80 percent of girls were enrolled. The required age at which children should start standard one is 7 years. However, data on primary school enrolment show that at the time of the survey only 34 percent of all seven year olds were enrolled. Children are most likely to be in school by the ages of 12 and 13, with rates of 96 and 95 percent, respectively.

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 8 percent of secondary school-aged children were enrolled, compared to 78 percent in primary school. For a person following a normal school curriculum, i.e. starting standard one at age 7, he/she is expected to start form one at age 14. The table shows that the biggest gender difference in enrolment rates is observed at the age of 17, with 7 percent of males and 24 percent of females being enrolled. It is also noticeable that the rate of boys enrolled in secondary school at the age of 14 is virtually null, while the share for girls is 2 percent.

Secondary school drop-out rates among secondary school-age individuals (14 to 19 years) are remarkably higher than those of primary school. 15 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

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

	Male	Female	Total
Total	70.6	50.4	60.2
15-19 years	87.2	83.3	85.3
20-29 years	82.8	65.6	72.9
30-39 years	69.1	56.1	61.9
40-49 years	80.9	32.7	58.6
50-59 years	43.3	17.1	30.7
60+ years	31.5	1.3	16.0
Accessible	70.2	52.7	61.2
15-19 years	87.7	87.5	87.6
20-29 years	86.4	65.2	74.6
30-39 years	66.8	57.4	61.4
40-49 years	77.8	40.9	60.5
50-59 years	41.9	17.1	31.0
60+ years	26.8	0.0	12.7
Remote	71.2	47.2	58.8
15-19 years	86.5	77.5	82.3
20-29 years	76.3	66.1	70.1
30-39 years	71.4	54.5	62.5
40-49 years	85.6	19.2	55.8
50-59 years	46.3	17.1	30.1
60+ years	36.4	2.9	19.8

Source:CWIQ 2007 Maswa DC

1. Base is population age 15+

18 year olds (at 29 percent), at 17 percent for males and 42 percent for females.

3.5 Literacy

Literacy is defined as the ability to read and write in at least one language. Those who can read but not write were counted as illiterate. The data on literacy was solely obtained by asking the respondent if he/she was able to read and write. Besides this information, no further tests on their ability to read or write were taken. Furthermore, questions that helped determine adult literacy was only asked for individuals aged 15 or older.

Adult Literacy

Overall, 60 percent of the population aged 15 and above in the district are literate. The difference in literacy rates among males and females is about 21 percentage points at 71 and 50 percent respectively. The literacy rate is negatively correlated with age. While individuals aged between 15 and 19 have the highest literacy rate (85 percent) while only 16 percent of those who are above 60 years know how to read and write. There are remarkable gender differences in literacy. Furthermore, the gap is larger for the older cohorts.

There are no strong differences in the overall literacy rate by village location. The literacy rate for the 15-19 age-groups in accessible villages is 88 percent, whereas for remote villages the rate is 82 percent. In addition, in accessible villages the literacy rate of men is 17 percentage points higher than that of women. In remote villages, the difference is larger, of 24 percentage points. On the contrary, while the literacy rate of women in accessible villages is about 6 percentage points higher than that of women in remote villages, there is no strong difference in literacy rates between men in accessible and remote villages. Finally, there is a significant difference in literacy rates among men and women above 60 years in both types of villages.

Youth Literacy

Table 3.7 shows literacy rates among the youth by age, gender and residential location. Youth literacy rate is calculated for all persons between 15 and 24 years old. The literacy rate for this group is 83 percent, but the gender difference is important. While the literacy rate for men is 88 percent, the rate for women is 9 percentage points lower, at 79 percent.

Analysis by age-groups shows that the 23-24 age-groups has the highest literacy rate at 89 percent. The youth literacy rate in accessible villages is higher than that of youth in remote villages at 86 and 80 percent respectively.

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

	Male	Female	Total
Total	87.5	79.1	83.4
15-17 years	87.1	85.5	86.3
18-20 years	86.9	75.4	81.2
21-22 years	84.5	68.8	76.7
23-24 years	100.0	82.7	89.3
Accessible	89.9	80.9	85.5
15-17 years	86.0	91.7	88.5
18-20 years	92.2	76.6	84.7
21-22 years	90.6	66.2	75.9
23-24 years	100.0	85.1	90.6
Remote	84.1	76.2	80.4
15-17 years	88.5	78.0	83.5
18-20 years	77.9	73.6	75.7
21-22 years	78.9	76.1	78.0
23-24 years	100.0	78.2	87.0

Source:CWIQ 2007 Maswa DC

1. Base is population aged 15-24

4 HEALTH

This chapter examines health indicators for the population in Maswa DC. First, selected health indicators are examined for the whole population. The second section analyses the reasons for dissatisfaction with health services. Section three shows the reasons for not consulting a health provider. This section is followed by analysis of the ill population by specific type of illness. A subgroup of those who had consulted a health provider is then taken from the ill population. In section five, this group is disaggregated by the type of health provider used. Section six presents an analysis of child deliveries. The chapter concludes with an analysis of child nutrition indicators.

4.1. Health Indicators

Throughout this report, a household is said to have access to medical services if it is located within 30 minutes travel from the nearest health facility. Judgment of the time it takes to travel to the facility as well as what is classed as a health facility is left to the discretion of the respondent. In second place, an individual is classed as having experienced need for medical assistance if he/she reports incidence of illness in the 4 weeks preceding the survey. It must be noted that need is based on self-reported occurrence of illness, rather than a diagnosis by a health professional. Thirdly, the rate of health

Table 4.1 - Health Indicators

	Medical Services			
	Access	Need	Use	Satisfaction
Total	21.2	21.2	23.5	64.4
Cluster Location				
Accessible	26.1	21.3	24.0	65.0
Remote	14.8	21.1	22.9	63.6
Poverty Status				
Poor	17.5	20.1	21.8	67.1
Non-poor	23.6	22.0	24.6	62.9
Socio-economic group				
Employee	57.7	22.5	25.5	67.8
Self-employed - agriculture	18.9	21.0	23.1	63.4
Self-employed - other	27.1	25.3	29.5	80.5
Other	12.9	19.3	22.0	54.7
Gender				
Male	20.6	18.6	20.8	65.1
Female	21.8	23.8	26.1	63.9
Age				
0-4	19.8	33.1	52.6	57.7
5-9	19.1	13.6	12.9	73.8
10-14	21.3	10.3	9.3	63.7
15-19	19.8	14.9	13.9	63.3
20-29	29.8	18.8	19.4	75.4
30-39	17.1	26.1	24.5	62.8
40-49	21.5	23.6	22.5	75.4
50-59	33.4	15.8	15.8	58.5
60+	21.7	31.1	25.9	65.9

Source:CWIQ 2007 Maswa 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.

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

Table 4.1 shows indicators regarding medical services by cluster location, poverty status, socio-economic status, gender and age. Overall, 21 percent of the population have access to medical services, 21 percent reported having needed them, and 24 percent reported having used medical services. Finally, 64 percent of those who used medical services reported being satisfied with them.

As would be expected, households in accessible villages have higher access to medical services than households in remote villages. Both show similar proportions of need, use, and satisfaction. Similar conclusions are drawn from the analysis by poverty status, with non-poor households reporting a higher access rate than poor households.

Regarding socio-economic status, the employees show the highest rate of access at 58 percent. The rates of need and use do not vary widely by socio-economic groups. In turn, the rate of satisfaction is highest for the self-employed in non-agricultural activities and lowest for the 'other' socio-economic group.

The gender breakdown shows that females report higher rates of need and use than males, whereas the rates of access and satisfaction do not vary substantially by gender.

Access does not vary widely by age-groups, but the rate of need and use do. The rate of need starts at 33 percent, and decreases down to 10 percent for the 10-

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.

		Reasons for dissatisfaction						
	Percent dissatisfied	Facilities not clean	Long wait	No trained professionals	Cost	No drugs available	Treatment unsuccessful	Other
Total	35.6	20.4	42.4	15.6	30.7	26.3	19.4	2.9
Cluster Location								
Accessible	35.0	21.8	45.8	15.5	27.1	28.4	20.8	4.1
Remote	36.4	18.4	37.8	15.7	35.4	23.5	17.6	1.2
Poverty Status								
Poor	32.9	12.9	39.9	13.4	33.9	31.8	18.6	7.0
Non-poor	37.1	24.1	43.7	16.7	29.0	23.6	19.9	0.8
Socio-economic group								
Employee	32.2	54.3	48.1	34.8	7.9	0.0	14.2	0.0
Self-employed - agriculture	36.6	13.9	40.9	14.7	35.0	25.3	20.6	3.5
Self-employed - other	19.5	53.3	62.0	0.0	0.0	48.3	23.4	0.0
Other	45.3	45.5	44.0	19.2	17.5	43.8	9.3	0.0
Gender								
Male	34.9	24.6	49.3	13.2	27.4	31.9	13.3	0.6
Female	36.1	17.3	37.4	17.3	33.1	22.3	23.9	4.5
Type of provider								
Public hospital	52.6	30.7	63.4	21.1	9.3	38.9	12.3	1.5
Private hospital	38.7	11.9	10.8	7.4	92.6	3.9	5.6	16.9
Religous hospital	92.3	0.0	0.0	0.0	100.0	8.3	0.0	0.0
Village health worker	31.3	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	15.4	0.0	0.0	7.9	77.2	12.1	24.7	0.0
Trad. Healer	24.4	0.0	0.0	7.1	23.8	0.0	81.7	0.0
Other	39.7	0.0	0.0	0.0	0.0	0.0	100.0	0.0

Source:CWIQ 2007 Maswa DC

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

14 age-group. It then increases again, reaching 31 percent of the 60+ cohort. The rate of use follows a similar trend. The rate of satisfaction does not follow a particular trend.

4.2 Reasons for Dissatisfaction

Table 4.2 shows the percentage of population who consulted a health provider in the 4 weeks preceding the survey and were not satisfied. Overall, 36 percent of users of healthcare facilities were dissatisfied, mostly because of unsuccessful long waits (42 percent), cost (31 percent), and unavailability of drugs (26 percent).

The analysis by cluster location shows no strong difference in the percent of dissatisfied users of healthcare. However, disaggregating the data further shows that accessible villages show a higher share of users complaining for the long wait and a lower share complaining for the cost than remote villages.

There are no strong differences in the dissatisfaction rate by poverty status. However, poor households report 'facilities not clean' less frequently, and unavailability of drugs more often than non-poor households.

The self-employed in non-agricultural activities are the socio-economic group with the lowest dissatisfaction rate (20 percent). The 'other' socio-economic group reports the highest dissatisfaction rate, at 45 percent.

Males report lack of hygiene, long waits and unavailability of drugs more often than females, who in turn report cost and unsuccessful treatment more often than the former. However, the overall dissatisfaction rate does not differ by gender.

Regarding health provider, religious hospitals report the highest dissatisfaction rate (92 percent), followed by public

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	76.5	97.2	1.0	1.2	0.2	0.7
Cluster Location						
Accessible	76.0	97.1	1.0	1.1	0.0	1.0
Remote	77.1	97.3	1.1	1.3	0.4	0.3
Poverty Status						
Poor	78.2	97.7	0.9	1.1	0.3	0.3
Non-poor	75.4	96.9	1.1	1.2	0.1	1.0
Socio-economic group						
Employee	74.5	98.4	0.0	0.0	0.0	1.6
Self-employed - agriculture	76.9	96.9	1.2	1.3	0.1	0.7
Self-employed - other	70.5	97.1	0.0	2.9	1.9	0.0
Other	78.0	99.7	0.3	0.0	0.0	0.0
Gender						
Male	79.2	97.2	0.8	1.5	0.2	0.6
Female	73.9	97.2	1.3	0.9	0.1	0.8
Type of sickness/injury						
Fever/malaria	3.2	0.0	37.9	22.9	0.0	39.2
Diarrhea/abdominal pains	6.0	0.0	67.9	32.1	0.0	0.0
Pain in back, limbs or joints	11.9	0.0	91.3	0.0	0.0	8.7
Coughing/breathing difficulty	10.1	0.0	65.4	46.5	0.0	6.5
Skin problems	0.0	0.0	0.0	0.0	0.0	0.0
Ear, nose, throat	19.8	0.0	0.0	0.0	37.4	62.6
Eye	0.0	0.0	0.0	0.0	0.0	0.0
Dental	0.0	0.0	0.0	0.0	0.0	0.0
Accident	16.1	19.0	0.0	0.0	0.0	81.0
Other	11.5	18.3	29.8	0.0	0.0	51.8

Source:CWIQ 2007 Maswa DC

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

hospitals (53 percent) and private hospitals (39 percent). The main cause for dissatisfaction in religious and private hospitals is cost; while in public hospitals the main cause is long waits. The main cause for dissatisfaction with pharmacists is the cost, and for traditional healers that the treatment was unsuccessful.

4.3 Reasons for Not Consulting

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, 77 percent of the population did not consult a health provider, typically because there was no need (97 percent of the cases).

Neither cluster location nor poverty status seems to be correlated with the percentage not consulting or with the reasons for not doing so. However, the breakdown by socio-economic group shows that the self-employed in non-agricultural activities report the lowest share not consulting (71 percent) and the highest share not consulting because of distance (3 percent). Males report a higher share not consulting than females, but there are no strong differences in the reasons.

The split-up by type of illness shows that for most infirmities the main cause for not consulting a health practitioner is cost, followed by distance. A notable exception is problems with the ear, nose or throat, where lack of confidence and 'other reasons' show shares of 37 and 63 percent, respectively.

4.4 Type of Illness

Table 4.4 shows the percentage of population sick or injured in the 4 weeks preceding the survey. Overall, 21 percent of the population was sick or injured. Fever or malaria is the most common sickness, affecting 52 percent of the ill population. Diarrhoea/abdominal pain comes in second place, affecting around 21 percent, followed by pain in back, limbs or joints and coughing/breathing difficulties (15 percent each). Other diseases affected minor shares of the ill population.

The gender breakdown reveals that females report a higher share of sick or injured population: 24 vs. 19 percent of males. The age breakdown shows that for males the share of sick/injured population is higher for the youngest (0-4) and oldest cohorts, at 32 and 34 percent, respectively, while the remaining age-groups report shares between 13 and 19 percent. In the

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	21.2	51.9	20.5	14.5	15.0	3.0	2.6	1.4	1.1	2.2	4.3
Male Total	18.6	50.5	20.6	13.2	16.5	3.1	1.4	1.2	1.1	3.4	3.4
0-4	31.9	69.0	25.0	3.4	16.6	5.9	0.0	0.0	0.0	0.0	0.0
5-9	12.6	49.5	34.4	7.5	1.4	3.6	0.0	0.0	0.0	1.9	3.1
10-14	12.5	24.5	22.7	3.0	27.1	0.0	8.6	0.0	3.1	9.2	6.7
15-29	15.6	56.2	8.6	14.6	15.3	0.0	0.0	0.0	0.0	12.6	3.8
30-49	18.5	51.3	16.8	16.0	17.9	3.4	2.4	2.4	0.0	0.0	6.9
50-64	15.6	0.0	26.8	31.2	36.5	7.3	0.0	0.0	13.1	0.0	0.0
65+	33.5	43.8	13.7	47.5	8.6	0.0	0.0	10.0	0.0	0.0	4.7
Female Total	23.8	53.0	20.4	15.5	13.9	2.8	3.4	1.4	1.1	1.3	5.0
0-4	34.2	69.6	19.2	7.1	11.7	2.0	2.0	3.2	0.0	0.0	2.1
5-9	14.5	61.2	7.4	7.9	15.9	7.4	10.1	0.0	0.0	0.0	1.1
10-14	8.0	24.1	21.9	4.7	49.0	4.9	0.0	0.0	0.0	0.0	6.3
15-29	19.0	58.7	28.5	2.4	9.4	3.3	4.4	0.0	4.8	1.8	12.5
30-49	30.7	48.5	23.3	19.3	14.7	2.3	3.7	1.4	0.0	2.1	5.1
50-64	33.4	30.5	22.8	27.5	17.5	2.5	2.9	2.9	2.9	0.0	4.9
65+	49.7	35.3	9.7	60.1	0.0	0.0	0.0	0.0	0.0	6.0	2.0

Source:CWIQ 2007 Maswa 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.

case of women, the share of ill population follows a similar trend, but starting at 34 percent and ending in 50 percent.

4.5 Health Provider

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, 31 percent to a pharmacist or chemist, 10 percent in private hospitals, and 13 percent to traditional healers.

The breakdown by village location shows that households in remote villages consult public hospitals more often than households in accessible villages (45 and 40 percent, respectively). Similarly, non-poor households make their consultations in public hospitals more often than poor households, with shares of 47 and 33 percent, respectively. In addition, the latter report higher shares consulting a chemists and traditional healers.

The breakdown by socio-economic group shows that the employees report the highest rate of attendance to public hospitals (55 percent), whereas the self-employed in non-agricultural activities report the lowest rate (29 percent). The latter report the highest share consulting traditional healers at 27 percent and, together with the self-employed in agriculture, report higher rates attending to private hospitals than the former. Finally,

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	Pharmacistch emist	Traditional healer	Other	Total
Total	41.9	10.4	0.7	2.1	0.0	31.4	13.1	0.4	100.0
Cluster Location									
Accessible	39.9	10.2	0.4	1.1	0.0	33.3	14.5	0.6	100.0
Remote	44.7	10.6	1.1	3.6	0.0	28.6	11.1	0.3	100.0
Poverty Status									
Poor	33.1	10.0	0.1	1.5	0.0	37.0	17.8	0.4	100.0
Non-poor	46.9	10.6	1.0	2.5	0.0	28.2	10.4	0.4	100.0
Socio-economic group									
Employee	55.1	4.6	0.0	0.0	0.0	32.6	7.7	0.0	100.0
Self-employed - agric	41.6	11.2	0.4	1.9	0.0	32.2	12.3	0.4	100.0
Self-employed - other	28.6	9.9	0.0	0.0	0.0	34.6	26.9	0.0	100.0
Other	48.5	5.9	5.8	9.3	0.0	16.3	12.4	1.7	100.0

Source:CWIQ 2007 Maswa DC

1. Base is population who consulted a health provider

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

	12-14 yrs	15-19 yrs	20-24 yrs	25-29 yrs	30-39 yrs	40+ yrs	Total	Pre-natal care
Total	0.0	6.0	18.7	36.1	21.0	3.1	12.9	97.8
Cluster Location								
Accessible	0.0	4.9	21.6	38.2	20.8	3.2	13.2	97.3
Remote	0.0	7.5	13.8	33.4	21.2	3.0	12.6	98.6
Poverty Status								
Poor	0.0	5.7	5.8	33.7	33.1	4.1	13.5	100.0
Non-poor	0.0	6.2	22.0	36.8	12.8	2.5	12.6	96.5
Socio-economic group								
Employee	0.0	0.0	20.2	49.6	15.8	0.0	14.1	72.6
Self-employed - agric	0.0	6.0	21.0	37.5	21.8	3.8	13.5	100.0
Self-employed - other	0.0	0.0	11.0	0.0	20.5	0.0	7.5	100.0
Other	0.0	20.2	0.0	25.4	15.8	0.0	10.2	100.0

Source:CWIQ 2007 Maswa DC

1. Base is females aged 12 or older.

the 'other' socio-economic group reports the lowest share consulting pharmacists at 16 percent, while the remaining groups report shares between 32 and 35 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, 13 percent of women in this age-group gave birth in the past year. No girls aged 14 or under gave birth in the district. Around 6 percent of the females between 15 and 19 gave birth. The rate peaks at 36 percent for the 25-29 groups. In addition, 98 percent of pregnant women received prenatal care.

There are no remarkable differences in the shares of women having given birth in the year preceding the survey by cluster location or poverty status. However, accessible villages report a higher share in the 20-24 and 25-29 cohorts. In turn, poor households report a higher share in the 30-39 cohorts and a lower share in the 20-24 age-groups than non-poor households.

The breakdown by socio-economic status shows that the highest rates correspond to the employees and the self-employed in agriculture, with shares of 14 percent each, while the self-employed in non-agricultural activities shows a rate of just 4 percent overall. For most of the socio-economic groups, the percentage of women who had a live birth is highest in the 25-29 cohorts (between 25 and 50 percent), except for the self-employed in non-agricultural activities, which peaks at 21 percent for the 30-39 cohort.

Table 4.7 shows the percentage distribution of births in the five years preceding the survey. Roughly, 23 percent of births in the 5 years preceding the survey took place in a hospital, 47 percent at home, 23 percent at a dispensary, and 3 percent in a health centre.

Women from accessible villages reported births in hospitals more often than women from accessible villages, at rates of 30 and 12 percent, respectively. In turn, the latter reported higher rates of births at home and at dispensaries than the former. Poor households report a higher rate of deliveries at home than non-poor households, which in turn reported a higher share of deliveries in hospitals.

The split-up by socio-economic group of the household shows that the most common place for deliveries for most groups was at home, followed by dispensaries. The exception is the 'employee' socio-economic group, for which the most common place for deliveries was a hospital, followed by home.

Table 4.8 shows the percentage distribution of births in the five years preceding the survey by person who assisted in the delivery of the child. Overall, 56 percent of the deliveries were attended by a health professional, mostly by midwives (49 percent of births). Traditional birth assistants (TBAs) accounted for 10 percent, whereas doctors or nurses attended 2 percent of the deliveries in the district. 33 percent of the deliveries did not receive assistance.

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	23.2	2.6	23.3	0.6	47.4	2.8	100.0
Cluster Location							
Accessible	30.2	2.5	19.6	1.0	43.3	3.3	100.0
Remote	12.4	2.8	28.9	0.0	53.8	2.1	100.0
Poverty Status							
Poor	19.0	1.3	22.0	0.0	54.6	3.2	100.0
Non-poor	26.4	3.6	24.2	1.1	42.1	2.6	100.0
Socio-economic group							
Employee	55.6	0.0	19.5	0.0	24.9	0.0	100.0
Self-employed - agriculture	22.0	2.8	22.4	0.7	49.1	2.8	100.0
Self-employed - other	24.3	0.0	29.6	0.0	41.4	4.6	100.0
Other	12.9	5.3	30.3	0.0	48.6	2.9	100.0

Source:CWIQ 2007 Maswa DC

1. Base is children under 5 years old.

Table 4.8: Percentage distribution of births in the five years preceding the survey by person who assisited 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	2.4	48.7	4.5	10.1	33.4	0.9	100.0	55.6
Cluster Location								
Accessible	1.5	52.4	4.6	12.0	29.0	0.6	100.0	58.4
Remote	3.7	43.1	4.4	7.2	40.3	1.3	100.0	51.2
Poverty Status								
Poor	1.0	45.4	3.4	7.1	43.2	0.0	100.0	49.8
Non-poor	3.4	51.2	5.3	12.3	26.3	1.5	100.0	59.9
Socio-economic group								
Employee	6.5	65.1	0.0	19.4	4.3	4.7	100.0	71.6
Self-employed - agriculture	2.1	47.7	5.0	9.1	35.3	0.8	100.0	54.8
Self-employed - other	0.0	53.9	0.0	20.5	25.6	0.0	100.0	53.9
Other	5.3	43.2	6.2	5.0	40.3	0.0	100.0	54.7

Source:CWIQ 2007 Maswa DC

1. Base is children under 5 years old.

The analysis by cluster location shows that accessible villages report a higher share of deliveries attended by health professionals than remote villages, at rates of 58 and 51 percent, respectively. Furthermore, midwives and TBAs were more common in accessible villages, while remote villages report a higher share of unassisted deliveries. A similar observation is made when analysing by poverty status, with poor households resembling remote villages.

The breakdown by socio-economic group shows that the employees report the highest share of deliveries attended by professionals: 72 percent, while the remaining groups report shares of around 55 percent. The employees also show the highest share of live births attended by a midwife, and together with the self-employed in non-agricultural activities, the highest share of child deliveries attended by TBAs. The 'other' socio-economic group reported the highest share of deliveries without assistance, at a rate of 40 percent, followed by the self-employed in agriculture, at 35 percent.

4.7 Child Nutrition

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

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

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

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

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

of wasting may be subject to seasonal variations.

Another measurement commonly used is weight-for-age. A child who is below minus two standard deviations from the median of the reference population is considered to be underweight. However, a child may be underweight because he/she is stunted, wasted or both. Interpretation of this indicator is complex and inconclusive; for this reason it was not incorporated into this report.

Overall, around 57 percent of the children participate in nutrition programs, 97 percent in weigh-in programs and 79 percent were vaccinated. In contrast, 23 percent are stunted and 2 percent are wasted.

There are no strong differences in the stunting and wasting rates by cluster location, but poor households report higher rates than non-poor households. In turn, non-poor households report higher rates of participation in nutrition and vaccination programs. Regarding socio-economic status, the employees report the lowest stunting rate, while the self-employed in agriculture report the highest. In addition, the former group reports the highest participation rates in the three programs.

The gender breakdown shows no difference in rates of wasting, but the rate of stunting is higher among boys than among girls (29 against 18 percent, respectively).

Table 4.9: Nutritional status indicators and program participation rates

	Nutritional status indicators		Program participation		
	Stunted	Wasted	Nutrition	Weigh-in	Vaccinated
Total	23.2	1.8	57.1	96.7	79.4
Cluster Location					
Accessible	22.1	1.5	57.0	97.2	82.6
Remote	24.9	2.3	57.3	95.9	74.4
Poverty Status					
Poor	28.5	3.9	48.7	95.5	76.2
Non-poor	18.9	0.2	63.3	97.6	81.7
Socio-economic Group					
Employee	8.2	2.9	82.4	100.0	83.5
Self-employed - agriculture	25.0	2.1	56.5	96.8	79.5
Self-employed - other	14.8	0.0	57.5	92.7	76.2
Other	19.2	0.0	44.1	97.1	77.7
Gender and age in completed years					
Male	28.9	2.4	54.5	95.4	77.6
0	29.9	4.1	52.2	91.0	88.0
1	28.0	6.1	47.5	95.3	82.9
2	34.8	0.0	61.3	100.0	84.7
3	26.1	0.0	69.9	95.8	62.3
4	24.5	1.7	40.9	95.5	62.7
Female	18.3	1.3	59.3	97.8	80.9
0	4.4	0.0	56.1	93.4	84.8
1	20.8	2.3	58.7	96.1	86.3
2	22.9	0.0	51.5	100.0	81.6
3	26.9	4.1	55.9	98.9	73.0
4	12.8	0.0	72.0	100.0	79.4
Orphan status					
Orphaned	39.5	0.0	49.1	93.2	51.1
Not-orphaned	22.5	1.9	57.2	96.8	80.3
Foster status					
Fostered	39.3	0.0	72.2	100.0	59.9
Not-fostered	22.2	1.9	56.3	96.7	80.9

Source:CWIQ 2007 Maswa DC

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

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	67.2	89.4	89.3	85.9	81.0	44.2	89.0	85.2	80.7	52.6
Cluster Location										
Accessible	68.5	89.9	89.4	86.5	81.7	46.1	89.2	85.1	81.4	49.9
Remote	65.3	88.6	89.1	85.0	79.9	41.3	88.8	85.5	79.6	56.7
Poverty Status										
Poor	62.9	85.1	88.5	84.9	78.5	42.3	88.9	83.7	78.0	47.6
Non-poor	70.4	92.6	89.8	86.6	82.9	45.6	89.1	86.4	82.7	56.3
Socio-economic group										
Employed	80.7	100.0	86.1	86.1	86.1	61.9	86.1	86.1	86.1	72.2
Self-employed - agric	64.8	88.7	89.7	86.1	80.2	42.7	89.4	85.4	79.8	51.9
Self-employed - other	83.1	87.9	83.1	83.1	83.1	37.3	83.1	83.1	83.1	46.7
Other	70.1	92.4	92.4	85.5	85.5	57.6	92.4	85.5	85.5	52.7
Gender and age in completed years										
Male	66.8	88.2	88.3	85.0	79.6	42.8	87.4	83.3	79.3	54.9
0	11.7	81.5	74.2	67.0	51.7	44.2	71.2	60.7	51.7	7.6
1	79.8	87.2	93.6	90.9	85.9	35.2	93.6	90.9	85.9	58.1
2	83.5	89.0	92.3	91.0	91.0	59.6	92.3	91.0	91.0	79.7
3	82.7	95.8	95.8	91.7	89.5	44.0	94.4	90.2	88.1	64.5
4	86.6	89.2	86.5	86.5	83.8	28.2	86.5	86.5	83.8	76.0
Female	67.6	90.4	90.1	86.6	82.2	45.4	90.4	86.9	81.9	50.6
0	17.7	83.4	77.0	60.6	48.2	42.3	77.0	60.6	48.2	10.5
1	66.5	88.4	93.4	93.4	90.3	39.2	91.8	91.8	88.7	39.3
2	76.3	93.9	93.9	93.9	90.6	50.5	97.3	93.9	90.6	47.7
3	78.7	87.0	87.8	87.1	82.4	52.0	87.8	87.8	82.4	74.2
4	89.9	97.7	95.9	94.0	94.0	43.2	95.9	95.9	94.0	73.5

Source:CWIQ 2007 Maswa DC

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

A child is considered orphan if he/she is under 18 years old and has lost at least one parent. In turn, a child is considered fostered when at least one of his/her parents does not leave at home. The breakdown by orphan status shows that the rates of stunting and wasting are higher among orphaned children. Regarding program participation, orphan children are less likely to participate in nutrition and vaccination programs than non-orphaned children.

In turn, the breakdown by foster status shows that fostered children report a higher rate of stunting than non-fostered children. Fostered children report lower rates of participation in nutrition and vaccination programs than non-fostered children.

Table 4.10 shows the percent distribution of children vaccinated by type of vaccination received. Overall, 67 percent of children under 5 have vaccination against measles, 89 against BCG, and roughly between 81 and 89 percent received vaccinations against DPT and OPV (except for OPV0, at 44 percent). Finally, 53 percent of the children in the district receive vitamin A supplements.

There are no major differences in the vaccination rates by cluster location or poverty status, except for measles, BCG and OPV3, which are higher in non-poor households. The share of children taking vitamin A is higher in remote villages and non-poor households.

The socio-economic breakdown shows that the employees tend to report the highest shares, followed by the 'other' socio-economic group (households where the main income earner is unemployed, inactive, unpaid or a household worker). In contrast, the self-employed in non-agricultural activities tend to report the lowest shares.

The gender breakdown shows no extreme differences between the vaccination rates of boys and girls. The age breakdown shows that the share of children

consuming vitamin A tends to increase with age. The share of vaccinated children tends to increase with age, except for the 4 year old boys, who tend to show lower vaccination rates than the 1 year olds.

Table 4.11 shows the percent distribution of children vaccinated by source of information. Overall, the information for 94 percent of the vaccinated children was supported by a vaccination card.

Remote villages report a higher share of vaccinated children with health cards, but there are no strong differences by poverty status. The breakdown by socio-economic groups shows that the 'other' socio-economic group has the highest share of vaccinated children with health cards (100 percent), followed by the self-employed in agriculture and in non-agricultural activities, at 94 and 95 percent, respectively. The employees report the lowest share, at 86 percent.

Finally, the age breakdown shows that children under the age of one report lower shares of health card than the remaining age-groups, with 25 percent of boys and 21 percent of girls in that age-group presenting other sources of information.

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

	Health Card	Other	Total
Total	94.2	5.8	100.0
Cluster Location			
Accessible	91.9	8.1	100.0
Remote	98.0	2.0	100.0
Poverty Status			
Poor	95.3	4.7	100.0
Non-poor	93.4	6.6	100.0
Socio-economic group			
Employed	86.1	13.9	100.0
Self-employed - agriculture	94.3	5.7	100.0
Self-employed - other	94.5	5.5	100.0
Other	100.0	0.0	100.0
Gender and age in completed years			
Male	93.3	6.7	100.0
0	74.6	25.4	100.0
1	98.2	1.8	100.0
2	98.6	1.4	100.0
3	100.0	0.0	100.0
4	97.0	3.0	100.0
Female	95.0	5.0	100.0
0	78.9	21.1	100.0
1	100.0	0.0	100.0
2	96.6	3.4	100.0
3	97.7	2.3	100.0
4	98.2	1.8	100.0

Source:CWIQ 2007 Maswa DC

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

5 EMPLOYMENT

This chapter examines employment indicators for the population of Maswa 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 68 percent of the adult population is employed and 29 percent underemployed. Unemployment is virtually 0 percent and the inactivity rate is

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

	Working			Not working			
	Employed	Under emp.	Total	Unemploy.	Inactive	Total	Total
Total	67.8	29.3	97.1	0.0	2.9	2.9	100.0
Cluster Location							
Accessible	64.4	32.4	96.9	0.0	3.1	3.1	100.0
Remote	72.4	25.0	97.4	0.0	2.6	2.6	100.0
Poverty Status							
Poor	64.4	32.3	96.6	0.0	3.4	3.4	100.0
Non-poor	69.5	27.8	97.3	0.0	2.7	2.7	100.0
Gender and age							
Male	62.7	34.6	97.4	0.0	2.6	2.6	100.0
15-29	74.1	23.0	97.0	0.0	3.0	3.0	100.0
30-49	50.6	47.0	97.6	0.0	2.4	2.4	100.0
50-64	56.9	43.1	100.0	0.0	0.0	0.0	100.0
65+	71.3	22.5	93.7	0.0	6.3	6.3	100.0
Female	72.5	24.3	96.9	0.0	3.1	3.1	100.0
15-29	76.7	20.1	96.8	0.0	3.2	3.2	100.0
30-49	67.4	31.9	99.2	0.0	0.8	0.8	100.0
50-64	72.4	27.6	100.0	0.0	0.0	0.0	100.0
65+	74.5	6.1	80.6	0.0	19.4	19.4	100.0

Source:CWIQ 2007 Maswa 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.

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

	Total population			Heads of household		
	Active population	Unemployment rate	Underemploy-ment rate	Active population	Unemploy-ment rate	Underemploy-ment rate
Total	97.1	0.0	30.2	98.6	0.0	43.2
Cluster Location						
Accessible	96.9	0.0	33.5	99.2	0.0	49.0
Remote	97.4	0.0	25.7	97.8	0.0	35.1
Poverty Status						
Poor	96.6	0.0	33.4	97.8	0.0	45.9
Non-poor	97.3	0.0	28.6	98.9	0.0	42.0
Gender and age						
Male	97.4	0.0	35.6	98.4	0.0	46.5
15-29	97.0	0.0	23.7	100.0	0.0	71.8
30-49	97.6	0.0	48.1	98.1	0.0	48.7
50-64	100.0	0.0	43.1	100.0	0.0	45.9
65+	93.7	0.0	24.0	96.1	0.0	25.4
Female	96.9	0.0	25.1	99.5	0.0	30.9
15-29	96.8	0.0	20.7	100.0	0.0	17.6
30-49	99.2	0.0	32.1	100.0	0.0	50.7
50-64	100.0	0.0	27.6	100.0	0.0	20.3
65+	80.6	0.0	7.6	97.9	0.0	13.4

Source:CWIQ 2007 Maswa DC

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

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

	Active population				Active		
	Employed	Under emp.	Working	Unemployed	Total	Inactive	Total
Total	76.8	19.4	96.2	0.0	96.2	3.8	100.0
Cluster Location							
Accessible	73.8	21.0	94.8	0.0	94.8	5.2	100.0
Remote	81.1	17.2	98.3	0.0	98.3	1.7	100.0
Poverty Status							
Poor	77.1	20.9	98.0	0.0	98.0	2.0	100.0
Non-poor	76.6	18.6	95.2	0.0	95.2	4.8	100.0
Gender and age							
Male	76.6	20.2	96.8	0.0	96.8	3.2	100.0
15-16	85.4	14.6	100.0	0.0	100.0	0.0	100.0
17-19	79.1	17.5	96.6	0.0	96.6	3.4	100.0
20-21	64.2	29.8	94.0	0.0	94.0	6.0	100.0
22-23	69.5	24.9	94.4	0.0	94.4	5.6	100.0
Female	77.0	18.6	95.6	0.0	95.6	4.4	100.0
15-16	80.6	12.5	93.1	0.0	93.1	6.9	100.0
17-19	71.9	22.7	94.6	0.0	94.6	5.4	100.0
20-21	79.4	16.8	96.2	0.0	96.2	3.8	100.0
22-23	77.9	22.1	100.0	0.0	100.0	0.0	100.0

Source:CWIQ 2007 Maswa 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.

3 percent. The breakdown by cluster location shows that households from remote villages are more likely to be employed than households from accessible

villages at 72 and 64 percent respectively. In turn, the latter report a higher underemployment rate than the former at 32 and 25 percent respectively. On the other hand, non-poor households show a higher employment rate than poor households. For both genders, underemployment rate peaks for the 30-39 cohort. Around 47 percent of the males in this group are underemployed, whereas the share for females is 32 percent

The adult population that was no working in the 4 weeks preceding the survey was mostly inactive, rather than unemployed. This means that most of them were students, sick people, etc. rather than people looking for work and ready for it. As would be expected, the share of inactive population is higher in the 65+ cohort.

5.1.2 Employment of Household Heads

Table 5.2 shows the principal labour force indicators for the adult population compared to the household heads. Activity rates are similar for total population and household heads, but underemployment is higher among the latter. The rate of underemployment is higher in accessible villages and poor households, for the total population as well as for household heads.

The gender breakdown shows that in the general population males are more likely to be underemployed than females, with rates of 36 and 25 percent, respectively. A similar difference is observed for the household heads.

The breakdown by age-groups shows that underemployment decreases with age of the household head. The trend is less clear for the general population.

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 about 97 percent. However, underemployment is lower: 19 percent of workers is underemployed, as opposed to 30 percent of workers for the whole adult population. The youth from remote villages has higher underemployment than their counterparts.

The breakdown by gender and poverty status shows no strong correlation with the distribution of the population by work status.

5.2 Working population

Table 5.4 shows that the vast majority of the working population is formed by households working in other activities

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

	Employee	Self-employed Agriculture	Self-employed Other	Other	Total
Total	2.9	36.2	3.1	57.9	100.0
Cluster Location					
Accessible	4.2	34.7	3.9	57.2	100.0
Remote	1.0	38.2	2.0	58.8	100.0
Poverty Status					
Poor	0.4	37.0	1.6	60.9	100.0
Non-poor	4.1	35.7	3.8	56.4	100.0
Gender and age					
Male	3.4	56.0	4.2	36.4	100.0
15-29	0.9	18.7	2.1	78.4	100.0
30-49	6.2	78.4	5.1	10.3	100.0
50-64	5.3	84.8	8.9	1.0	100.0
65+	0.0	89.5	2.6	7.9	100.0
Female	2.3	17.4	2.0	78.2	100.0
15-29	2.6	6.1	0.6	90.7	100.0
30-49	2.7	17.4	2.9	77.0	100.0
50-64	1.7	37.7	2.0	58.7	100.0
65+	0.0	50.6	5.6	43.8	100.0

Source:CWIQ 2007 Maswa DC

1. Base is working population aged 15+

Table 5.5 - Percentage distribution of the working population by employer

	State/NGO/ Other	Private	Household	Total
Total	2.2	40.1	57.7	100.0
Cluster Location				
Accessible	3.3	39.8	57.0	100.0
Remote	0.8	40.6	58.6	100.0
Poverty Status				
Poor	0.0	39.1	60.9	100.0
Non-poor	3.3	40.6	56.0	100.0
Gender and age				
Male	2.5	61.4	36.1	100.0
15-29	0.0	22.3	77.7	100.0
30-49	5.4	84.3	10.3	100.0
50-64	3.3	95.7	1.0	100.0
65+	0.0	92.1	7.9	100.0
Female	2.0	20.0	78.1	100.0
15-29	2.1	7.5	90.5	100.0
30-49	2.3	20.8	76.8	100.0
50-64	1.7	39.7	58.7	100.0
65+	0.0	56.2	43.8	100.0

Source:CWIQ 2007 Maswa DC

1. Base is working population aged 15+

Table 5.6 - Percentage distribution of the working population by activity

	Agriculture	Mining/manuf/ energy/constr	Pub & priv services	Domestic duties	Other	Total
Total	87.8	0.6	4.6	6.2	0.8	100.0
Cluster Location						
Accessible	85.8	0.9	6.5	5.7	1.1	100.0
Remote	90.6	0.2	1.9	6.9	0.4	100.0
Poverty Status						
Poor	92.0	0.3	1.2	6.2	0.2	100.0
Non-poor	85.7	0.8	6.2	6.2	1.2	100.0
Gender and age						
Male	86.3	1.3	5.5	5.8	1.1	100.0
15-29	82.9	0.7	2.9	13.5	0.0	100.0
30-49	88.7	1.9	8.1	0.0	1.2	100.0
50-64	85.8	2.0	8.8	0.0	3.4	100.0
65+	93.3	0.0	0.0	4.0	2.6	100.0
Female	89.2	0.0	3.7	6.6	0.6	100.0
15-29	87.9	0.0	3.2	8.9	0.0	100.0
30-49	92.2	0.0	4.9	1.5	1.5	100.0
50-64	92.1	0.0	3.6	4.3	0.0	100.0
65+	74.1	0.0	0.0	25.9	0.0	100.0

Source:CWIQ 2007 Maswa DC

1. Base is working population aged 15+

(inactive, unemployed, unpaid workers, domestic workers) at 58 percent and the self-employed in agriculture at 36 percent. The self-employed in non-agricultural activities and employees only account for 3 percent each of the working population. The breakdown by cluster location shows no strong correlation with the distribution of the working population by work status. On the other hand, poor households report a higher share in other activities than non-poor households at 61 and 56 percent respectively.

The gender breakdown shows that a higher share of males is self-employed in agriculture or in non-agricultural activities, while females report a higher

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

	Employee		Self-employed Agriculture		Self-employed Other		Other		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0	100.0
Agriculture	0.0	0.0	93.0	89.7	83.3	91.7	0.0	0.0	86.3	89.2
Mining & non-primary	10.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.3	0.0
Services	69.7	93.7	4.7	6.3	0.8	0.3	0.0	0.0	5.5	3.7
Domestic duties	0.0	0.0	0.0	1.8	15.9	7.9	0.0	0.0	5.8	6.6
Other	19.7	6.3	0.8	2.2	0.0	0.0	0.0	0.0	1.1	0.6

Source:CWIQ 2007 Maswa 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	0.0	100.0	100.0	100.0	100.0
Agriculture	0.0	0.0	0.0	0.0	88.3	91.0	86.3	89.2
Mining & non-primary	0.0	0.0	0.0	0.0	1.3	0.0	1.3	0.0
Services	87.5	100.0	51.0	0.0	3.8	1.7	5.5	3.7
Domestic duties	0.0	0.0	0.0	0.0	5.9	6.7	5.8	6.6
Other	12.5	0.0	49.0	0.0	0.7	0.6	1.1	0.6

Source:CWIQ 2007 Maswa DC

1. Base is working population aged 15+

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 the 65+ males (90 percent), the 'self-employed other' for 50-64 males (9 percent) and 'other' for 15-29 females (91 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 40 percent of the working population, which combined with individuals who work for their own households represent up to 97 percent of the working population.

The breakdown by cluster location shows no strong correlation with the distribution of the working population by employer status. Further breakdown of the data by poverty status reveals that poor households report a higher share of the working population working for the household than non-poor households at 61 and 56 percent respectively.

Males report a higher share working for a private employer, while females report a higher share working for the household. Most males work for a private employer, except in the 15-29 cohorts, where 78 percent of them work in the household. The share of females working in the private sector increases gradually with age, but is always lower than the respective shares of males. At the same time, the share of females working for the household decreases with age.

Table 5.6 shows the percentage distribution of the working population by main activity. The categories are agriculture; mining, manufacturing, energy and construction; services (transport, trade, private and public services); domestic duties; and other. Overall, agriculture and domestic duties together account for 94 percent of the working population. 88 percent of the population is engaged in agriculture, and 6 percent in domestic duties.

The split-up by remoteness of the village and poverty status of the household shows that accessible villages and non-poor households report lower shares working in agriculture than their respective counterparts.

The gender breakdown shows that the most common activities for females are agriculture and household duties, accounting for 96 percent of the working population. These are the main activities for men as well, but they are less concentrated, with 8 percent in other activities.

Table 5.9 Percentage distribution of the underemployed population by employment status

	Employee	Self-employed Agriculture	Self-employed Other	Other	Total
Total	4.6	49.3	6.4	39.7	100.0
Cluster Location					
Accessible	6.4	46.5	7.7	39.4	100.0
Remote	1.5	54.5	3.9	40.2	100.0
Poverty Status					
Poor	0.7	51.9	1.9	45.4	100.0
Non-poor	6.9	47.8	9.0	36.3	100.0
Gender and age					
Male	5.8	68.5	7.8	17.9	100.0
15-29	0.0	40.0	8.7	51.3	100.0
30-49	8.8	75.2	7.9	8.1	100.0
50-64	7.6	83.8	8.6	0.0	100.0
65+	0.0	100.0	0.0	0.0	100.0
Female	3.1	23.6	4.4	68.9	100.0
15-29	4.4	13.7	0.0	81.9	100.0
30-49	3.2	25.5	7.0	64.3	100.0
50-64	0.0	30.8	7.2	61.9	100.0
65+	0.0	100.0	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

The breakdown by age-groups shows that, for both genders, younger cohorts have higher shares dedicated to household duties. The share of males in agriculture is over 85 percent for the cohorts over 30 years of age. In turn, the share of females in agriculture is lower for the youngest and the oldest cohorts, where the shares dedicated to domestic duties are higher.

Table 5.7 shows the percentage distribution of the working population by employment status, gender and activity. Overall, around 89 percent of the female labour force is in agriculture, whereas the share for males is 86 percent. Domestic duties have the second highest shares for both genders: 6 percent for males and 7 percent for females. Each of the remaining activities occupies less than 10 percent of the labour force for each gender, but with the shares for males higher than or equal to those for females.

For both genders, most of the employees work in services with shares of 70 and 93 for males and females respectively. The self-employed in non-agricultural activities work also mostly in services, with shares of 67 percent for males and 61 percent for females. The female population in the 'other' group is concentrated in agriculture at 91 percent, whereas the males in this category are split between agriculture and domestic duties (84 and 16 percent, respectively).

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 services. The labour force working for private employers (whether formal or informal) is concentrated in agriculture. Among the individuals who were employed by the household, the main activity was agriculture (83 percent of males and 92 percent of females), but domestic duties also reports important shares (16 percent of males and 7 percent of females in this category).

5.3 Underemployed Population

The percentage distribution of the underemployed population by employment status is shown in Table 5.9. Overall, 49 percent of the underemployed population is self-employed in agriculture, 6 percent self-employed in other activities, 40 percent is in 'other' activities and 5 percent is formed by employees. Even though the self-employed in agriculture are 36 percent of the working population, they represent

Table 5.10 - Percentage distribution of the underemployed population by employer

	State/NGO/Other	Private	Household	Total
Total	4.0	56.5	39.5	100.0
Cluster Location				
Accessible	5.4	55.2	39.4	100.0
Remote	1.5	58.9	39.6	100.0
Poverty Status				
Poor	0.0	54.6	45.4	100.0
Non-poor	6.4	57.6	36.0	100.0
Gender and age				
Male	5.1	76.9	17.9	100.0
15-29	0.0	48.7	51.3	100.0
30-49	7.6	84.3	8.1	100.0
50-64	7.6	92.4	0.0	100.0
65+	0.0	100.0	0.0	100.0
Female	2.5	29.1	68.4	100.0
15-29	4.4	15.0	80.6	100.0
30-49	2.0	33.7	64.3	100.0
50-64	0.0	38.1	61.9	100.0
65+	0.0	100.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

1. Base is underemployed population aged 15+

Table 5.11 - Percentage distribution of the underemployed population by activity

	Agriculture	Mining/manuf/ energy/constr	private services	Domestic duties	Other	Total
Total	86.9	0.9	8.0	2.1	2.1	100.0
Cluster Location						
Accessible	84.2	1.4	9.9	1.7	2.8	100.0
Remote	91.7	0.0	4.6	3.0	0.8	100.0
Poverty Status						
Poor	95.8	0.0	1.9	1.6	0.7	100.0
Non-poor	81.6	1.4	11.6	2.5	2.9	100.0
Gender and age						
Male	84.1	1.6	10.1	2.4	1.9	100.0
15-29	82.5	2.9	5.7	8.8	0.0	100.0
30-49	83.3	1.6	12.7	0.0	2.5	100.0
50-64	83.8	0.0	12.6	0.0	3.7	100.0
65+	100.0	0.0	0.0	0.0	0.0	100.0
Female	90.6	0.0	5.2	1.8	2.3	100.0
15-29	90.3	0.0	4.4	5.3	0.0	100.0
30-49	89.8	0.0	5.4	0.0	4.7	100.0
50-64	92.8	0.0	7.2	0.0	0.0	100.0
65+	100.0	0.0	0.0	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

1. Base is underemployed population aged 15+

almost 49 percent of the underemployed.

The breakdown by cluster location shows that the underemployed population in remote villages is composed by a higher share of the self-employed in agriculture than the underemployed population from accessible villages.

The breakdown by poverty status shows that poor households report a higher share self-employed in agriculture and in the 'other' categories than non-poor households.

The gender breakdown shows that in the underemployed population, females are more likely than males to be in 'other' activities. In turn, males are more likely to be self-employed, either in agriculture on in non-agricultural activities, than females.

For males, the employees peak at 9 percent in the 30-39 cohort. The share self-employed in agriculture tends to increase with age. The 'self-employed other' group shows a higher share in the 15-29 cohort, and the 'other' group shows positive rates only in the 15-29 age-group. In the case of females, the share self-employed in agriculture increases with age as well, and the share in 'other' activities is highest in the 15-29 at 82 percent.

Table 5.10 shows the percentage distribution of the underemployed population by employer. Overall, the underemployed population mostly works for a private employer at 56 percent and in second place for the household at 40 percent. The State, NGOs, and other types of employer only account for 4 percent of the underemployed population.

The breakdown by cluster location shows no strong correlation with the distribution of the underemployed population by employer. Further breakdown by poverty status shows that poor households report higher shares of underemployed population working for the household than non-poor households at 45 and 36 percent respectively.

The gender breakdown shows that underemployed males are strongly concentrated in private employers at 77 percent. In turn, underemployed females are concentrated in household employers at 68 percent.

The age breakdown shows that underemployed males report a positive share working for the household only in the 15-29 cohorts. Underemployed females report a higher share working for the household in the youngest cohort (15-29) at 81 percent. Virtually all

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 2007 Maswa 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	29.2	0.0	26.7	0.0	37.9	0.0	6.1	100.0
Cluster Location										
Accessible	0.0	0.0	37.6	0.0	26.3	0.0	29.6	0.0	6.5	100.0
Remote	0.0	0.0	14.8	0.0	27.5	0.0	52.1	0.0	5.6	100.0
Poverty Status										
Poor	0.0	0.0	6.3	0.0	30.0	0.0	58.4	0.0	5.2	100.0
Non-poor	0.0	0.0	44.1	0.0	24.6	0.0	24.7	0.0	6.7	100.0
Gender and age										
Male	0.0	0.0	24.7	0.0	11.4	0.0	48.5	0.0	15.4	100.0
15-29	0.0	0.0	58.4	0.0	0.0	0.0	41.6	0.0	0.0	100.0
30-49	0.0	0.0	0.0	0.0	0.0	0.0	54.8	0.0	45.2	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	48.3	0.0	51.7	0.0	0.0	100.0
Female	0.0	0.0	32.2	0.0	36.9	0.0	30.9	0.0	0.0	100.0
15-29	0.0	0.0	74.2	0.0	0.0	0.0	25.8	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	77.7	0.0	22.3	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

1. Base is inactive population aged 15+

underemployed workers in the 65+ cohort were working for a private employer by the time of the survey.

The percentage distribution of the underemployed population by main economic activity is presented in Table 5.11. Overall, 87 percent of the underemployed workers are dedicated to agriculture, and 8 percent to services, with the remaining activities reporting shares between 1 and 2 percent.

Remote villages and poor households report higher shares in agriculture and lower shares in services than their respective counterparts.

The gender breakdown shows that underemployed females have a higher share dedicated to agriculture than underemployed males, who have a higher share in services. There appears to be no strong correlation between age and the distribution of the underemployed population by activity.

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. None of the respondents in the district was classified as unemployed.

Table 5.13 shows the main causes of economic inactivity. Overall, infirmity is the main cause for inactivity (40 percent), followed by being a student (29 percent) and being too old (27 percent).

The breakdown by cluster location shows that being a student is a more common cause for economic inactivity in accessible clusters than in remote clusters. In turn, being sick is more common in the latter.

The breakdown by poverty status shows that, as would be expected, being a student is a more common cause for economic inactivity among non-poor households. Being too old and being sick was reported by higher shares of the inactive population in poor households.

The gender breakdown shows that females report being a student or being too old more frequently than males, who in turn report infirmity more often. For both genders, being a student and being too old

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

	Fetching water	Fetching firewood	Cleaning toilet	Cooking	Care of children	Care or elderly/sick
Total	61.7	55.4	42.8	58.4	76.3	97.8
Cluster Location						
Accessible	62.0	53.9	42.3	59.3	76.8	98.3
Remote	61.4	57.4	43.5	57.0	75.4	97.2
Poverty Status						
Poor	61.0	56.2	24.8	56.7	81.0	97.1
Non-poor	62.1	54.9	52.0	59.2	73.8	98.2
Gender and age						
Male	34.2	24.1	32.1	19.6	66.6	97.8
15-29	58.1	37.9	42.2	31.7	61.6	99.0
30-49	20.8	16.9	28.2	12.7	74.2	97.6
50-64	14.8	8.9	19.8	8.5	60.8	100.0
65+	9.2	14.0	20.6	10.0	66.7	88.8
Female	87.7	84.8	52.9	94.8	85.4	97.9
15-29	96.5	89.7	54.6	97.7	83.4	99.2
30-49	93.9	89.3	57.8	99.4	92.5	99.6
50-64	73.0	81.7	53.0	91.6	86.0	97.8
65+	33.8	41.6	20.2	62.4	60.5	83.2

Source:CWIQ 2007 Maswa 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	68.1	44.3	31.5	40.5	69.8	87.3
Cluster Location						
Accessible	72.5	45.2	33.6	44.9	73.3	87.6
Remote	63.0	43.2	29.0	35.2	65.8	87.0
Poverty Status						
Poor	60.5	40.7	19.9	37.1	72.3	85.4
Non-poor	74.5	47.3	41.1	43.2	67.8	88.9
Gender and age						
Male	58.0	31.2	27.9	22.8	66.8	86.9
5-9	39.5	15.3	17.7	6.4	63.6	78.5
10-14	72.4	43.5	35.8	35.6	69.2	93.4
Female	78.2	57.4	35.1	58.1	72.9	87.8
5-9	60.2	34.0	22.1	27.2	71.5	79.3
10-14	92.5	75.8	45.5	82.6	74.0	94.5
Orphan status						
Orphaned	75.5	58.5	25.5	58.2	56.6	90.1
Not-orphaned	67.2	42.4	32.2	38.5	71.2	87.1
Foster status						
Fostered	71.5	45.4	34.5	35.2	56.0	87.2
Not-fostered	67.2	42.5	30.7	39.8	72.6	87.0

Source:CWIQ 2007 Maswa DC

are concentrated in specific age-groups: the youngest (15-29) and the oldest (65+) cohorts. Infirmity is also concentrated in the 30-39 cohorts for females at 100 percent, but is relatively more widespread among males.

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,

Table 5.16- Child labour (age 5 to 14)

		Main activity			Employer	
	Working	Agriculture	Household	Other	Private	Household
Total	56.7	43.2	55.7	1.1	1.8	98.2
Cluster Location						
Accessible	55.0	42.3	56.6	1.1	2.2	97.8
Remote	58.9	44.3	54.5	1.1	1.3	98.7
Poverty Status						
Poor	57.5	49.1	50.3	0.5	1.5	98.5
Non-poor	56.0	38.4	60.0	1.6	2.1	97.9
Gender and age						
Male	58.1	47.5	50.9	1.6	3.0	97.0
5-9	37.6	28.2	68.3	3.5	3.5	96.5
10-14	99.5	62.2	37.6	0.3	2.7	97.3
Female	55.3	38.9	60.5	0.6	0.6	99.4
5-9	35.7	15.9	82.8	1.4	1.4	98.6
10-14	98.0	57.1	42.9	0.0	0.0	100.0
Orphan status						
Orphaned	77.9	54.3	45.7	0.0	1.2	98.8
Not-orphaned	55.1	42.1	56.7	1.3	1.9	98.1
Foster status						
Fostered	73.1	47.0	51.0	2.0	5.0	95.0
Not-fostered	54.1	42.5	56.5	1.1	1.3	98.7

Source:CWIQ 2007 Maswa DC

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

The breakdown by cluster location reveals no strong correlation with activities undertaken in the household. Further breakdown by poverty status shows that poor households report a higher share of population taking care of children than non-poor households at 81 and 74 percent respectively.

The most important differences are shown in the gender and age-breakdown. Females report remarkably higher shares in all the activities, with rates fluctuating between 53 and 95 percent. The shares for males range from 20 to 67 percent, except for taking care of the sick and elderly (99 percent).

The analysis of age-groups shows that for males the shares decrease with age in all activities. In the case of females the shares show sharp decreases in the oldest cohort.

5.6 Child Labour

Table 5.15 shows that the most common activity for children between 5 and 14 years old is taking care of the elderly and sick. Children from accessible villages and non-poor households report higher shares in most activities than their counterparts. The gender breakdown shows that girls report higher rates than boys for all household activities. The analysis by age-groups shows that the 10-14 cohorts for both genders have higher rates than the youngest children, for all household tasks.

The breakdown by orphan status shows that orphaned children are more likely to undertake most of the activities, except for cleaning the toilet and taking care of the elderly and sick. Similarly, fostered children are more likely to undertake most of the household tasks under analysis than non-fostered children.

The main descriptive statistics for child labour are presented in Table 5.16. The most important result of the table is that 57 percent of the children are economically active. Their main economic activity is mostly household duties at 56 percent. The share of working children dedicated to agriculture is higher in poor households than in non-poor households. In turn, the latter report a higher share of working population dedicated in households activities than the former. The particular activity does not show evident correlation with cluster location.

The gender breakdown shows that girls are more likely to work in household

duties than boys, while the latter are more likely to be involved in agriculture than the former. However, the main difference is given by the age breakdown. Roughly one third of children in the 5-9 cohorts were part of the working population, whereas virtually all the children in the 10-14 cohort were working at the time of the survey. Virtually all the children in the 10-14 cohort work in the household while around 4 percent of boys in the 5-9 cohort work for a private employer.

The breakdown by orphan and foster status shows stark differences. Orphaned children are more likely to be working than non-orphaned children, at rates of 78 and 55 percent, respectively. Similarly, fostered children are more likely to be working than non-fostered children, at rates of 73 and 54 percent, respectively. Orphaned children are more likely to work in agriculture than non-orphaned children, who in turn report a higher share working in the household activities.

6 PERCEPTIONS ON WELFARE AND CHANGES WITHIN COMMUNITIES

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

6.1 Economic Situation

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

6.1.1 Perception of Change in the Economic Situation of the Community

Table 6.1 shows the percent distribution of households by the perception of the economic situation of the community compared to the year before the survey. Results show that 32 percent of all households in the district reported a positive change in the economic situation of their community. 31 percent of the population reported observing no changes in their community's economic situation. The majority reported the community economic condition to have deteriorated compared to the year before the survey at (33 percent).

Looking at the overall community economic situation by household characteristics, it is observed that poverty status of the household does not show correlation with the perceived economic change. However, 41 percent of the people living in remote clusters report deterioration in their community's economic situation compared to 27 percent of those living in accessible clusters. While, 37 percent of households in accessible villages reported a positive change in their economic situation, the share for households in remote clusters is 27 percent.

The percentage of households with seven or more members who reported worsening of their community's economic situation is higher than that of households with one or two members at 35 and 25 percent respectively. Furthermore, there is a difference of 5 percentage points between households owning no land and those owning six or more hectares of land who reported deterioration in their community's economic situation at 31 and 36 percent respectively. While 40 percent of households owning large livestock only reported deterioration in their community's economic situation, the share for households owning no livestock is only 31 percent.

While 43 percent of households in the 'employee' category reported deterioration in their community's economic situation, the share for households whose main income earner belongs to the 'self-employed other' category is only 15 percent. Furthermore, 74 percent of households where the household head is single reported an improvement in the economic conditions of their communities compared to 29 percent of 'monogamous' households.

It is also observed that the percentage of households where the head has no education and reported observing no changes in their community's economic conditions is 28 percentage points higher

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	11.8	20.7	31.2	31.2	1.4	3.7	100.0
Cluster Location							
Accessible	7.7	19.4	31.6	34.9	1.9	4.5	100.0
Remote	17.6	22.5	30.5	26.1	0.8	2.5	100.0
Poverty Status							
Poor	12.6	20.3	33.2	29.3	0.0	4.6	100.0
Non-poor	11.5	20.9	30.3	32.0	2.0	3.3	100.0
Household size							
1-2	12.7	11.7	35.1	28.3	3.3	8.9	100.0
3-4	6.8	24.4	32.2	31.3	1.2	4.1	100.0
5-6	14.4	18.5	36.7	27.8	0.8	1.8	100.0
7+	13.4	22.3	25.9	34.1	1.4	2.9	100.0
Area of land owned by the household							
None	11.7	19.2	36.7	24.3	2.2	5.8	100.0
< 1 ha	0.0	7.7	53.1	39.2	0.0	0.0	100.0
1-1.99 ha	9.5	37.0	41.6	8.4	0.0	3.5	100.0
2-3.99 ha	11.3	13.2	31.1	36.2	1.2	7.0	100.0
4-5.99 ha	14.2	22.5	32.0	31.2	0.0	0.0	100.0
6+ ha	13.1	22.5	21.2	38.8	2.6	1.8	100.0
Type of livestock owned by the household							
None	9.3	21.5	33.8	29.2	0.8	5.3	100.0
Small only	13.5	16.9	44.9	24.8	0.0	0.0	100.0
Large only	23.7	19.7	18.7	34.3	3.7	0.0	100.0
Both	11.2	21.0	27.0	35.1	2.1	3.6	100.0
Socio-economic Group							
Employee	11.2	31.8	23.3	30.8	2.9	0.0	100.0
Self-employed - agriculture	12.4	20.5	32.8	29.7	0.8	3.7	100.0
Self-employed - other	5.2	9.2	20.7	45.6	9.4	10.0	100.0
Other	11.5	24.9	26.7	37.0	0.0	0.0	100.0
Gender of the head of household							
Male	12.8	21.7	29.7	31.2	1.3	3.3	100.0
Female	8.4	16.7	36.7	31.2	1.8	5.2	100.0
Marital status of the head of household							
Single	0.0	9.6	16.2	74.2	0.0	0.0	100.0
Monogamous	13.2	23.0	30.0	29.2	1.0	3.6	100.0
Polygamous	13.1	16.5	30.8	34.6	2.1	3.0	100.0
Loose union	0.0	0.0	58.4	41.6	0.0	0.0	100.0
Widow/div/sep	8.1	21.3	34.1	29.5	1.8	5.1	100.0
Education level of the head of household							
None	9.5	19.4	38.9	26.3	1.8	4.2	100.0
Primary	12.9	19.5	28.7	34.7	0.4	3.9	100.0
Secondary +	16.6	34.1	10.6	32.2	6.5	0.0	100.0

Source:CWIQ 2007 Maswa DC

than that of households where the head has secondary education or more, at 39 and 11 percent respectively. In addition, 35 percent of male-headed households report deterioration in the economic conditions of their communities against 25 percent of female-headed households.

6.1.2 Perception of Change in the Economic Situation of the Household

Table 6.2 shows the percent distribution of households by the perception of their economic situation compared to the year before the survey. 25 percent of the

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	18.2	29.9	26.2	24.3	1.0	0.4	100.0
Cluster Location							
Accessible	15.9	26.7	27.4	27.9	1.4	0.7	100.0
Remote	21.4	34.3	24.6	19.2	0.4	0.0	100.0
Poverty Status							
Poor	20.2	30.1	32.6	16.5	0.0	0.7	100.0
Non-poor	17.4	29.8	23.5	27.6	1.4	0.3	100.0
Household size							
1-2	32.0	25.0	33.1	9.9	0.0	0.0	100.0
3-4	13.5	36.0	24.5	23.8	1.4	0.8	100.0
5-6	20.4	23.3	30.8	25.1	0.3	0.0	100.0
7+	15.9	31.3	22.5	28.3	1.4	0.5	100.0
Area of land owned by the household							
None	22.6	26.6	32.9	17.9	0.0	0.0	100.0
< 1 ha	34.3	19.1	22.8	11.4	12.5	0.0	100.0
1-1.99 ha	20.5	36.9	21.3	17.7	3.6	0.0	100.0
2-3.99 ha	19.6	25.9	30.4	22.4	0.0	1.7	100.0
4-5.99 ha	16.2	30.2	23.4	30.2	0.0	0.0	100.0
6+ ha	13.0	33.7	22.1	30.3	0.9	0.0	100.0
Type of livestock owned by the household							
None	22.6	27.0	31.3	18.4	0.7	0.0	100.0
Small only	21.1	27.7	27.7	23.5	0.0	0.0	100.0
Large only	17.9	36.1	7.0	35.3	3.7	0.0	100.0
Both	10.9	32.9	24.5	29.6	0.8	1.3	100.0
Socio-economic Group							
Employee	4.3	19.7	21.1	45.1	9.9	0.0	100.0
Self-employed - agriculture	20.3	31.2	26.9	20.5	0.5	0.5	100.0
Self-employed - other	10.0	15.4	20.7	53.9	0.0	0.0	100.0
Other	11.2	35.7	26.5	26.6	0.0	0.0	100.0
Gender of the head of household							
Male	17.2	31.4	24.8	25.4	1.2	0.0	100.0
Female	22.2	24.2	31.4	20.1	0.0	2.1	100.0
Marital status of the head of household							
Single	0.0	33.5	16.2	50.3	0.0	0.0	100.0
Monogamous	17.9	31.3	24.2	25.6	1.0	0.0	100.0
Polygamous	14.9	33.2	24.9	25.2	1.8	0.0	100.0
Loose union	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	24.4	23.6	30.4	19.7	0.0	2.0	100.0
Education level of the head of household							
None	20.1	30.7	33.0	15.1	0.0	1.1	100.0
Primary	16.6	30.8	22.6	29.2	0.8	0.0	100.0
Secondary +	19.8	20.1	16.9	36.7	6.5	0.0	100.0

Source:CWIQ 2007 Maswa DC

households reported an improvement in their economic conditions, while 26 percent reported same conditions compared to the year preceding the survey.

While 55 percent of those living in accessible clusters reported deterioration of the households' economic situation, the share for remote clusters was 43 percent. The breakdown by poverty status shows that 33 percent of poor households reported observing no changes in their economic situation against 24 percent of non-poor households. In contrast, non-poor households reported improvement in their economic situation more frequently than poor households at 28 and 17 percent respectively.

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	14.9	24.7	44.8	15.6	100.0
Cluster Location					
Accessible	13.0	26.2	44.8	16.0	100.0
Remote	17.5	22.5	44.9	15.1	100.0
Poverty Status					
Poor	5.2	12.3	53.1	29.4	100.0
Non-poor	19.0	29.9	41.3	9.8	100.0
Household size					
1-2	21.1	14.1	39.8	25.1	100.0
3-4	12.5	27.7	50.7	9.1	100.0
5-6	15.2	26.1	42.7	16.0	100.0
7+	14.4	24.9	43.7	16.9	100.0
Area of land owned by the household					
None	18.3	24.5	41.1	16.0	100.0
< 1 ha	23.2	0.0	58.3	18.5	100.0
1-1.99 ha	5.1	15.9	51.2	27.8	100.0
2-3.99 ha	12.5	20.3	48.4	18.7	100.0
4-5.99 ha	14.9	27.1	43.2	14.7	100.0
6+ ha	17.9	33.0	40.9	8.2	100.0
Type of livestock owned by the household					
None	11.8	20.4	47.7	20.0	100.0
Small only	14.9	31.1	34.0	20.0	100.0
Large only	10.5	30.6	46.0	13.0	100.0
Both	20.9	27.0	43.5	8.6	100.0
Socio-economic Group					
Employee	35.7	47.2	17.1	0.0	100.0
Self-employed - agriculture	15.1	23.2	44.8	16.9	100.0
Self-employed - other	5.4	28.4	60.0	6.2	100.0
Other	1.9	20.5	55.8	21.8	100.0
Gender of the head of household					
Male	15.7	26.3	41.6	16.4	100.0
Female	11.9	18.6	57.0	12.6	100.0
Marital status of the head of household					
Single	40.7	43.1	16.2	0.0	100.0
Monogamous	15.6	25.8	40.3	18.3	100.0
Polygamous	17.1	24.6	47.4	10.9	100.0
Loose union	0.0	0.0	58.4	41.6	100.0
Widow/div/sep	9.9	21.9	53.7	14.5	100.0
Education level of the head of household					
None	9.8	20.9	51.5	17.9	100.0
Primary	16.7	23.0	43.9	16.5	100.0
Secondary +	27.5	52.8	19.6	0.0	100.0

Source:CWIQ 2007 Maswa DC

The percentage of households with seven or more members who reported an improvement in the economic conditions of their households is higher than that of households with one or two members at 30 and 10 percent respectively. Furthermore, while 23 percent of households owning no land report much worse economic conditions of their households, the share for households owning six or more hectares of land is 13 percent. Disaggregating the data further shows that 54 percent of households owning large livestock express more negative views on their households' economic conditions compared to 43 percent of households owning both small and large livestock.

The percentage of households in the 'employee' category who reported an improvement in their households' economic conditions is more than twice as

high as that of households whose main income earner is self-employed in agriculture at 55 and 22 percent respectively. Furthermore, while 34 percent of households where the head is single reported deterioration in their household are economic conditions, the share for households where the head has a loose union is virtually null. 26 percent of male-headed households report positive change in the household's economic conditions compared to 20 percent of female-headed households. Similarly, the percentage of households reporting deterioration in the household's economic conditions is higher for households where the head has no education than households where the head has secondary education or more at 51 and 40 percent respectively.

6.2 Self-reported Difficulties in Satisfying Household Needs

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

6.2.1 Food Needs

Table 6.3 shows the percent distribution of households by the difficulty in satisfying the food needs of the household during the year before the survey. Overall, 61 percent of the district's households frequently (often/always) experienced food shortages while the remaining population never or seldom experienced food shortages.

While 30 percent of non-poor households in seldom experience food shortages, the share for poor households is 12 percent. In contrast, 82 percent of poor households frequently experienced food shortages, whereas the share for poor households is 51 percent. The breakdown by cluster location reveals no strong differences.

18 percent of landless households never experienced problems satisfying food needs compared to 5 percent of households 1 to 2 hectares of land. Furthermore, while 65 percent of households with one or two members frequently experience food shortages, the share for households with 5 to 6 members is 59 percent. There is also some correlation between livestock ownership and satisfying food needs. While 68 percent of households owning no livestock frequently experienced food shortages, the

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	95.4	2.2	2.3	0.0	100.0
Cluster Location					
Accessible	94.2	3.1	2.7	0.0	100.0
Remote	97.1	1.0	1.9	0.0	100.0
Poverty Status					
Poor	95.6	1.9	2.5	0.0	100.0
Non-poor	95.3	2.4	2.3	0.0	100.0
Household size					
1-2	100.0	0.0	0.0	0.0	100.0
3-4	99.1	0.0	0.9	0.0	100.0
5-6	93.8	3.7	2.6	0.0	100.0
7+	92.7	3.5	3.8	0.0	100.0
Area of land owned by the household					
None	97.2	1.8	1.1	0.0	100.0
< 1 ha	88.6	0.0	11.4	0.0	100.0
1-1.99 ha	96.4	0.0	3.6	0.0	100.0
2-3.99 ha	94.6	4.5	0.9	0.0	100.0
4-5.99 ha	98.8	1.2	0.0	0.0	100.0
6+ ha	93.5	2.1	4.4	0.0	100.0
Type of livestock owned by the household					
None	95.9	2.6	1.5	0.0	100.0
Small only	83.7	3.8	12.5	0.0	100.0
Large only	100.0	0.0	0.0	0.0	100.0
Both	96.9	1.9	1.2	0.0	100.0
Socio-economic Group					
Employee	76.2	5.5	18.3	0.0	100.0
Self-employed - agriculture	96.4	2.3	1.3	0.0	100.0
Self-employed - other	100.0	0.0	0.0	0.0	100.0
Other	94.7	0.0	5.3	0.0	100.0
Gender of the head of household					
Male	96.1	2.1	1.8	0.0	100.0
Female	92.8	2.7	4.5	0.0	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	94.7	2.6	2.7	0.0	100.0
Polygamous	98.0	0.7	1.2	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	93.9	3.2	2.9	0.0	100.0
Education level of the head of household					
None	97.5	0.5	2.1	0.0	100.0
Primary	96.1	3.3	0.6	0.0	100.0
Secondary +	81.5	3.7	14.8	0.0	100.0

Source:CWIQ 2007 Maswa DC

share for households owning both small and large livestock is 53 percent.

The socio-economic group of the household also shows some correlation with the household's ability to satisfy its food needs. While 78 percent of households belonging to the 'other' socio-economic group reported frequent problems satisfying food needs, the share for households whose main income earner is an employee is only 17 percent.

Furthermore, while 41 percent of households where the head is single had never experienced food shortages the share for households where the head has a loose union is virtually null.

The breakdown by gender of the household head shows that female-headed households reported having food shortages

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	97.7	1.5	0.4	0.4	100.0
Cluster Location					
Accessible	96.9	1.8	0.7	0.7	100.0
Remote	98.9	1.1	0.0	0.0	100.0
Poverty Status					
Poor	98.9	1.1	0.0	0.0	100.0
Non-poor	97.2	1.7	0.5	0.5	100.0
Household size					
1-2	95.0	1.7	3.3	0.0	100.0
3-4	95.1	3.4	0.0	1.5	100.0
5-6	98.2	1.8	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	94.3	3.5	2.2	0.0	100.0
< 1 ha	100.0	0.0	0.0	0.0	100.0
1-1.99 ha	98.2	1.8	0.0	0.0	100.0
2-3.99 ha	97.2	1.3	0.0	1.5	100.0
4-5.99 ha	97.6	2.4	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	95.2	3.2	0.8	0.8	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	98.6	1.4	0.0	0.0	100.0
Self-employed - other	81.3	6.2	6.2	6.2	100.0
Other	100.0	0.0	0.0	0.0	100.0
Gender of the head of household					
Male	98.5	1.5	0.0	0.0	100.0
Female	94.7	1.6	1.8	1.8	100.0
Marital status of the head of household					
Single	66.5	33.5	0.0	0.0	100.0
Monogamous	98.8	1.2	0.0	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	77.2	22.8	0.0	0.0	100.0
Widow/div/sep	94.9	1.5	1.8	1.8	100.0
Education level of the head of household					
None	98.4	1.6	0.0	0.0	100.0
Primary	97.6	0.9	0.7	0.7	100.0
Secondary +	95.4	4.6	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

more frequently than male-headed households as 70 percent of female-headed households experienced frequent food shortages compared to 58 percent of male-headed households. Likewise, while 70 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 20 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, 95 percent of the households in the district reported that they never had problems paying school fees and only 2 percent of the households reported that they often/always had problems paying school fees. It is worth noting that children in primary state schools do not pay fees. While children in secondary state schools do pay fees, the secondary school enrolment rates are very low (for more details, see chapter 3).

Poverty status and cluster location do not show strong correlation with the ability to pay school fees. However, smaller households find problems paying school fees less frequently than larger households. While virtually all households (100 percent) with one or two members never had problems with paying school fees, the share for households with seven or more members is 93 percent.

Furthermore, while 11 percent of households with less than 1 hectare of land often experienced problems with paying school fees the share for households owning four to six hectares of land is virtually null. Similarly, while 13 percent of households with small livestock only reported often experiencing problems with paying school fees, the share for households owning large livestock only is virtually null.

Disaggregating the data further shows that virtually all households in the 'self-employed other' category never had problems with paying school fees, whereas the share of households in the 'employee' category is 76 percent.

Gender and marital status are not strongly correlated to ability of households in paying school fees. Lastly, households where the household head has secondary education or more had problems paying school fees more often than households where the head has no education.

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

	Never	Seldom	Often	Always	Total
Total	99.5	0.4	0.1	0.0	100.0
Cluster Location					
Accessible	99.3	0.7	0.0	0.0	100.0
Remote	99.8	0.0	0.2	0.0	100.0
Poverty Status					
Poor	100.0	0.0	0.0	0.0	100.0
Non-poor	99.4	0.5	0.1	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+	98.8	1.0	0.2	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	96.4	3.6	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	99.7	0.0	0.3	0.0	100.0
Type of livestock owned by the household					
None	99.2	0.8	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	99.8	0.0	0.2	0.0	100.0
Socio-economic Group					
Employee	93.0	7.0	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	98.8	0.0	1.2	0.0	100.0
Gender of the head of household					
Male	99.9	0.0	0.1	0.0	100.0
Female	98.2	1.8	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	99.9	0.0	0.1	0.0	100.0
Polygamous	100.0	0.0	0.0	0.0	100.0
Loose union	100.0	0.0	0.0	0.0	100.0
Widow/div/sep	98.2	1.8	0.0	0.0	100.0
Education level of the head of household					
None	99.8	0.0	0.2	0.0	100.0
Primary	100.0	0.0	0.0	0.0	100.0
Secondary +	95.4	4.6	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

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	40.3	34.0	22.0	3.6	100.0
Cluster Location					
Accessible	42.3	32.0	22.8	2.9	100.0
Remote	37.7	36.8	20.9	4.6	100.0
Poverty Status					
Poor	33.4	36.9	25.8	3.9	100.0
Non-poor	43.2	32.8	20.5	3.5	100.0
Household size					
1-2	30.0	29.6	34.7	5.8	100.0
3-4	44.8	33.1	18.2	3.8	100.0
5-6	39.3	31.8	22.8	6.0	100.0
7+	41.0	37.2	20.3	1.4	100.0
Area of land owned by the household					
None	40.5	33.9	21.7	3.9	100.0
< 1 ha	54.8	10.9	34.3	0.0	100.0
1-1.99 ha	31.4	36.7	22.2	9.6	100.0
2-3.99 ha	36.8	36.4	22.6	4.2	100.0
4-5.99 ha	39.4	35.0	24.1	1.5	100.0
6+ ha	45.9	32.6	19.3	2.2	100.0
Type of livestock owned by the household					
None	38.0	35.2	21.8	5.0	100.0
Small only	32.0	30.0	37.3	0.7	100.0
Large only	32.3	32.2	29.8	5.7	100.0
Both	49.1	34.1	14.9	1.9	100.0
Socio-economic Group					
Employee	63.6	22.7	13.7	0.0	100.0
Self-employed - agriculture	39.2	33.4	23.6	3.7	100.0
Self-employed - other	44.6	45.4	10.0	0.0	100.0
Other	29.1	40.6	19.9	10.4	100.0
Gender of the head of household					
Male	40.5	34.9	21.6	3.1	100.0
Female	39.7	30.6	23.9	5.8	100.0
Marital status of the head of household					
Single	100.0	0.0	0.0	0.0	100.0
Monogamous	37.3	33.9	25.4	3.4	100.0
Polygamous	43.9	38.6	14.8	2.7	100.0
Loose union	64.4	0.0	0.0	35.6	100.0
Widow/div/sep	39.6	32.0	24.1	4.2	100.0
Education level of the head of household					
None	34.2	36.6	25.7	3.4	100.0
Primary	42.5	32.6	20.5	4.4	100.0
Secondary +	55.0	30.4	14.6	0.0	100.0

Source:CWIQ 2007 Maswa DC

survey. Almost all (98 percent) households in the district reported that they never had problems paying house rent. However, it is noticeable that while 34 percent of households where the head is single seldom had problems paying house rent, the share for 'polygamous' households is virtually null. Similarly, 6 percent of households whose main income earner is self-employed in non-agriculture activitites and 5 percent of households where the head has secondary education or more reported that they seldom had problems paying house rent. Other household characteristics such as cluster location, poverty status, household size, livestock and land ownership and gender do not show strong correlation with the ability to pay house rent.

6.2.4 Paying Utility Bills

Table 6.6 shows the percent distribution of households by the difficulty in paying utility bills during the year before the survey. The outcome on household's ability to pay utility bills is almost similar to those of paying house rent. Nearly all (99 percent) households in the district do not face problems with paying utility bills. However, it is observed that 29 percent of households where the household head is single and 11 percent of the employees claim having problems with paying utility bills often. Likewise, 5 percent of households where the household head has secondary education or more and 4 percent of households owning one hectare of land reported often having problems paying utility bills. Other selected household characteristics such as cluster location, poverty status, household size, livestock ownership and gender do not show strong correlation with the ability to pay utility bills.

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. 74 percent of the households reported that they never/seldom experienced problems paying for healthcare in the year prior to the survey. Disaggregating the data further shows that while 37 percent of households located in remote clusters seldom experienced problems paying for healthcare, the share for households located in accessible clusters is 32 percent. In addition, 76 percent of non-poor households had never experienced problem paying for healthcare, whereas the share for poor households is 70 percent.

41 percent of households with one or two more members reported often/always having problems paying for healthcare compared to 21 percent of households with seven or more members. Similarly, while 34 percent of households owning

Table 6.8: Percentage of households owning certain assets

			Livestock				Motor-		Wheel
	Home	Land	Small	Large	Both	Vehicle	cycle	Bicycle	barrow
Total	85.8	82.9	10.2	10.5	31.9	0.4	0.2	59.6	12.5
Cluster Location									
Accessible	84.0	83.1	11.8	9.9	29.4	0.7	0.0	63.6	13.3
Remote	88.4	82.5	8.0	11.3	35.4	0.0	0.5	54.1	11.4
Poverty Status									
Poor	89.3	83.3	11.1	9.7	27.4	0.0	0.0	38.3	2.2
Non-poor	84.4	82.7	9.8	10.8	33.8	0.5	0.3	68.6	16.8
Household size									
1-2	73.1	64.0	11.0	5.1	7.7	0.0	0.0	25.2	6.7
3-4	81.4	80.7	5.6	9.3	19.2	0.0	0.0	59.3	5.9
5-6	86.5	81.3	15.4	10.3	35.8	0.0	0.8	64.1	12.4
7+	92.1	90.8	9.8	13.0	44.9	1.0	0.0	67.2	18.6
Socio-economic Group									
Employee	34.8	53.1	26.7	7.0	10.4	0.0	0.0	79.7	24.0
Self-employed - agriculture	90.0	84.3	9.9	10.7	34.3	0.0	0.0	57.8	11.6
Self-employed - other	72.1	88.4	6.2	11.6	27.8	6.2	3.1	74.5	23.0
Other	89.9	85.0	3.1	9.2	22.4	0.0	0.0	50.2	3.1
Gender of the head of household									
Male	85.8	84.6	10.9	10.7	34.3	0.0	0.2	64.5	12.0
Female	85.8	76.4	7.5	9.6	22.8	1.8	0.0	41.1	14.3

Source:CWIQ 2007 Maswa DC

less than one hectare of land often/always experienced problems paying for healthcare, the share for households owning six or more hectares of land is 21 percent.

Furthermore, 73 percent of households owning both large and small livestock never/seldom had problems paying for health care compared to 62 percent of those owning small livestock. Similarly, while the majority (64 percent) of households whose main income earner is an employee never had problems paying for healthcare; the share for households belonging to the 'other' socio-economic group is 29 percent. Likewise, virtually all households (100 percent) where the household head is single never had problems paying for healthcare compared to 37 percent of households where the household head is 'monogamous'. It is also observed that 36 percent of households where the household head has a loose union always had problems paying for healthcare compared to 2 percent of 'polygamous' households.

55 percent of household heads with secondary or more education never had problems paying for healthcare compared to 34 percent of household heads with no education. Ability to pay for healthcare is not strongly correlated to gender of the household head.

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, 86 percent of the district's households own their dwellings while 83 percent owns some land. 10 percent of all households own small livestock, and 11 percent of all households owns large

Table 6.9: Percent distribution of households by occupancy status

	Own	Rent	Free	Other	Total
Total	85.8	6.2	7.4	0.6	100.0
Cluster Location					
Accessible	84.0	7.2	7.8	1.0	100.0
Remote	88.4	4.9	6.7	0.0	100.0
Poverty Status					
Poor	89.3	4.2	6.5	0.0	100.0
Non-poor	84.4	7.1	7.7	0.8	100.0
Household size					
1-2	73.1	17.0	8.3	1.6	100.0
3-4	81.4	10.4	7.4	0.7	100.0
5-6	86.5	2.8	9.8	0.9	100.0
7+	92.1	2.3	5.6	0.0	100.0
Socio-economic Group					
Employee	34.8	17.0	48.2	0.0	100.0
Self-employed - agriculture	90.0	4.0	5.4	0.7	100.0
Self-employed - other	72.1	27.9	0.0	0.0	100.0
Other	89.9	5.2	4.9	0.0	100.0
Gender of the head of household					
Male	85.8	5.4	8.0	0.7	100.0
Female	85.8	9.4	4.8	0.0	100.0

Source:CWIQ 2007 Maswa DC

livestock. While 60 percent of all households own a bicycle, the share for households owning a motorcycle is virtually null.

Table 6.9 shows the percent distribution of households by occupancy status. 89 percent of households located in remote clusters own their dwellings compared to 84 percent of households located in accessible clusters. Disaggregating the data further shows that 92 percent of households with seven or more members own their dwellings compared to 73 percent of households with one or two members. Furthermore, while 90 percent of households whose main income earner belongs to the 'self-employed agriculture' socio-economic group own their dwellings, the share for households whose main income earner is an employee is 35 percent. There appears to be no strong correlation between gender and the distribution of households by occupancy status. It is also observed that 65 percent of male-headed households own a bicycle compared to 41 percent of female-headed households. Likewise, 67 percent of households with seven or more members own a bicycle compared to only 25 percent of households with one or two members.

6.3.2 Occupancy Documentation

The percent distribution of households by type of occupancy documentation is shown in Table 6.10. Most residents in the district do not have any documentation to verify their occupancy status. Only 2 percent of the households possess formal occupancy documentation, which include a title deed, renting contract or payment receipt. 16 percent of households in this district posses other documents and 82 percent have no documentation at all.

6.4 Agriculture

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

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

	Title deed	Renting contract	Payment receipt	Other document	No document	Total	Secure tenure
Total	1.2	0.6	0.2	15.7	82.3	100.0	1.9
Cluster Location							
Accessible	2.0	0.7	0.3	18.9	78.1	100.0	3.0
Remote	0.0	0.6	0.0	11.3	88.2	100.0	0.6
Poverty Status							
Poor	1.3	0.0	0.0	15.0	83.7	100.0	1.3
Non-poor	1.1	0.9	0.3	16.0	81.8	100.0	2.2
Household size							
1-2	0.0	2.0	0.0	23.4	74.6	100.0	2.0
3-4	0.0	1.5	0.0	11.4	87.1	100.0	1.5
5-6	1.6	0.0	0.0	15.2	83.2	100.0	1.6
7+	2.0	0.0	0.5	16.6	81.0	100.0	2.4
Socio-economic Group							
Employee	0.0	0.0	0.0	20.8	79.2	100.0	0.0
Self-employed - agriculture	0.9	0.3	0.2	15.0	83.6	100.0	1.4
Self-employed - other	6.2	6.2	0.0	24.1	63.4	100.0	12.5
Other	0.0	0.0	0.0	12.1	87.9	100.0	0.0
Gender of the head of household							
Male	1.0	0.5	0.0	14.9	83.7	100.0	1.5
Female	1.8	1.1	0.9	18.9	77.3	100.0	3.8

Source:CWIQ 2007 Maswa DC

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

	% of hhs using	Fertilizer	Improved seedling	Fingerlings	Hooks and nets	Insecticides	Other
Total	73.5	60.5	65.1	0.0	0.0	59.3	0.0
Cluster Location							
Accessible	66.7	59.5	61.7	0.0	0.0	63.5	0.0
Remote	82.9	61.7	68.8	0.0	0.0	54.7	0.0
Poverty Status							
Poor	61.5	63.2	55.9	0.0	0.0	52.0	0.0
Non-poor	78.5	59.7	68.1	0.0	0.0	61.7	0.0
Household size							
1-2	56.7	56.2	62.5	0.0	0.0	30.7	0.0
3-4	78.0	47.7	69.8	0.0	0.0	64.9	0.0
5-6	75.8	70.2	57.6	0.0	0.0	61.2	0.0
7+	74.0	64.4	67.1	0.0	0.0	60.7	0.0
Socio-economic Group							
Employee	72.1	34.1	76.5	0.0	0.0	66.3	0.0
Self-employed - agriculture	75.1	64.3	64.0	0.0	0.0	58.3	0.0
Self-employed - other	66.7	54.3	68.8	0.0	0.0	64.6	0.0
Other	59.3	30.5	67.6	0.0	0.0	63.8	0.0
Gender of the head of household							
Male	76.6	60.8	64.5	0.0	0.0	62.7	0.0
Female	61.8	59.5	68.1	0.0	0.0	43.3	0.0

Source:CWIQ 2007 Maswa DC

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

6.4.1 Agricultural Inputs

The survey collected information on agricultural practices. Data includes information regarding usage of farm inputs and the main source from which the farmers got the inputs. Table 6.11 shows the percent distribution of households using certain inputs. This

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	33.4	4.7	2.0	35.2	24.6	100.0
Cluster Location						
Accessible	39.0	6.9	2.5	29.6	22.0	100.0
Remote	27.2	2.3	1.4	41.5	27.6	100.0
Poverty Status						
Poor	27.5	5.5	0.0	34.5	32.6	100.0
Non-poor	35.4	4.5	2.6	35.5	22.0	100.0
Household size						
1-2	24.1	8.7	0.0	26.4	40.9	100.0
3-4	41.8	4.7	4.0	32.9	16.7	100.0
5-6	27.9	3.3	1.8	37.3	29.8	100.0
7+	33.3	4.8	1.1	37.6	23.3	100.0
Socio-economic Group						
Employee	47.3	0.0	24.0	19.1	9.7	100.0
Self-employed - agriculture	31.6	4.6	0.8	36.4	26.7	100.0
Self-employed - other	42.7	16.1	0.0	24.9	16.3	100.0
Other	39.8	0.0	0.0	44.9	15.3	100.0
Gender of the head of household						
Male	33.2	5.0	1.8	36.4	23.6	100.0
Female	34.7	3.7	2.5	29.6	29.6	100.0

Source:CWIQ 2007 Maswa DC

1. Base is households using agricultural inputs

information is complemented by Table 6.12, which shows the main source of agricultural inputs.

74 percent of all farmers apply agricultural inputs to their farms and the majority (61 percent) of those who use farm inputs apply fertilizers. The percentage of households located in remote clusters using agricultural inputs is higher than that of households located in accessible clusters, at 83 and 67 percent respectively. Similarly, non-poor households report a higher share using agriculture inputs than poor households at 79 and 62 percent respectively.

Disaggregation of the data further shows that as the number of household member's increases, the usage of agricultural inputs also increases. Furthermore, while 75 percent of households where the main income earner is self-employed in agriculture use agricultural inputs, the share for households belonging to the 'other' socio-economic group is 59 percent. Likewise, use of agricultural inputs in male-headed households is higher than in female-headed households at 77 and 62 percent respectively.

Most households that use agricultural inputs obtain them from cooperatives (36 percent) and in second place purchasing them at an open market (33 percent). While 25 percent of the households obtain their by preparing them, 5 percent obtain them from government and 2 percent reports donor agencies as their main source.

Data also shows that the percentage of households located in accessible clusters who purchase agricultural inputs at an open market is higher than that of households located in remote clusters at 39 and 27 percent respectively. Likewise, the percentage of households with three to four members who purchase agricultural inputs at an open market is 18 percentage points higher than that of households with one or two members, at 42 and 24 percent respectively.

While 47 percent of households where the main income earner belongs to the 'employee' category purchase their agricultural inputs at an open market, the share of households belonging to the 'self-employed agriculture' socio-economic group is 32 percent. Furthermore, 36 percent of male-headed households obtain

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	17.1	2.8	10.7	25.5	15.7	28.2	100.0
Cluster Location							
Accessible	16.9	4.2	11.0	25.8	15.5	26.6	100.0
Remote	17.5	0.8	10.3	25.0	16.0	30.4	100.0
Poverty Status							
Poor	16.7	1.4	11.2	26.1	16.8	27.9	100.0
Non-poor	17.3	3.4	10.5	25.2	15.3	28.3	100.0
Household size							
1-2	36.0	4.7	11.3	29.8	6.4	11.8	100.0
3-4	19.3	4.6	16.1	27.6	13.8	18.6	100.0
5-6	18.7	0.0	8.7	30.6	20.4	21.6	100.0
7+	9.2	2.7	8.3	19.7	16.9	43.3	100.0
Socio-economic Group							
Employee	46.9	5.8	19.9	7.9	5.5	14.0	100.0
Self-employed - agriculture	15.7	2.6	9.4	25.6	16.9	29.7	100.0
Self-employed - other	11.6	5.4	14.3	35.5	10.0	23.2	100.0
Other	15.0	0.0	16.3	29.2	14.7	24.9	100.0
Gender of the head of household							
Male	15.4	2.3	9.6	24.2	16.9	31.6	100.0
Female	23.6	4.6	15.1	30.2	11.4	15.1	100.0

Source:CWIQ 2007 Maswa 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	57.7	2.4	22.0	11.2	5.3	1.4	100.0
Cluster Location							
Accessible	60.7	1.9	19.9	11.8	4.8	0.9	100.0
Remote	53.5	3.2	24.8	10.4	5.9	2.1	100.0
Poverty Status							
Poor	62.9	2.8	21.2	9.8	3.4	0.0	100.0
Non-poor	55.5	2.3	22.3	11.8	6.0	2.0	100.0
Household size							
1-2	87.1	4.5	5.3	3.1	0.0	0.0	100.0
3-4	71.5	1.0	17.1	7.6	2.1	0.7	100.0
5-6	54.2	3.5	23.2	12.2	6.9	0.0	100.0
7+	42.1	2.1	29.4	15.4	7.9	3.2	100.0
Socio-economic Group							
Employee	82.6	0.0	2.0	12.5	0.0	2.9	100.0
Self-employed - agriculture	55.1	2.6	23.1	12.3	5.7	1.2	100.0
Self-employed - other	60.6	5.2	21.0	3.1	5.4	4.7	100.0
Other	68.4	0.0	25.4	3.1	3.1	0.0	100.0
Gender of the head of household							
Male	55.1	2.2	23.3	11.9	5.7	1.8	100.0
Female	67.6	3.5	17.0	8.6	3.4	0.0	100.0

Source:CWIQ 2007 Maswa DC

their agricultural inputs from cooperatives compared to 30 percent o female-headed households. On the other hand, while 30 percent of female-headed households obtain agricultural inputs by preparing them themselves, the share for male-headed households is only 24 percent.

6.4.2 Landholding

Table 6.13 shows the percent distribution of households by the area of land owned. Around 31 percent of households own less than two acres of land (including 17 percent of landless households). 26

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	1.7	7.0	50.9	33.6	5.0	1.9	100.0
Cluster Location							
Accessible	2.9	7.2	52.4	32.3	3.7	1.4	100.0
Remote	0.0	6.6	48.8	35.3	6.8	2.5	100.0
Poverty Status							
Poor	2.2	7.0	51.8	33.7	3.2	2.1	100.0
Non-poor	1.5	6.9	50.5	33.5	5.8	1.8	100.0
Household size							
1-2	0.0	5.7	48.9	36.6	5.3	3.5	100.0
3-4	2.2	2.2	47.3	37.9	8.8	1.6	100.0
5-6	2.6	8.1	55.3	27.3	4.9	1.8	100.0
7+	1.4	9.7	51.1	33.7	2.5	1.6	100.0
Area of land owned by the household							
None	4.1	4.3	40.1	43.5	6.8	1.2	100.0
< 1 ha	0.0	11.4	38.0	16.5	34.2	0.0	100.0
1-1.99 ha	0.0	2.8	69.5	18.8	3.0	5.9	100.0
2-3.99 ha	2.0	5.1	52.7	34.7	3.2	2.3	100.0
4-5.99 ha	1.2	8.4	50.6	36.8	1.5	1.5	100.0
6+ ha	1.1	10.6	50.2	31.9	5.4	0.7	100.0
Type of livestock owned by the household							
None	1.5	4.9	48.0	37.1	6.4	2.2	100.0
Small only	0.0	8.2	56.6	32.4	2.8	0.0	100.0
Large only	2.9	2.2	58.6	31.4	2.9	2.0	100.0
Both	2.2	11.2	50.9	29.4	4.3	2.0	100.0
Socio-economic Group							
Employee	0.0	11.3	39.6	37.8	11.3	0.0	100.0
Self-employed - agriculture	2.1	7.0	50.7	34.1	4.2	2.0	100.0
Self-employed - other	0.0	0.0	61.4	30.1	8.5	0.0	100.0
Other	0.0	10.3	53.1	25.9	6.7	4.0	100.0
Gender of the head of household							
Male	1.5	6.2	51.4	34.1	5.4	1.5	100.0
Female	2.5	9.9	49.1	31.6	3.7	3.1	100.0
Marital status of the head of household							
Single	0.0	0.0	49.7	50.3	0.0	0.0	100.0
Monogamous	1.3	6.2	53.9	32.9	4.1	1.5	100.0
Polygamous	2.2	8.1	45.5	35.6	7.6	0.9	100.0
Loose union	0.0	0.0	35.6	41.6	0.0	22.8	100.0
Widow/div/sep	2.4	8.2	50.3	31.5	4.5	3.1	100.0
Education level of the head of household							
None	2.2	7.8	52.6	32.4	2.4	2.6	100.0
Primary	1.6	4.9	50.6	34.2	7.2	1.6	100.0
Secondary +	0.0	16.5	44.8	35.1	3.7	0.0	100.0

Source:CWIQ 2007 Maswa DC

percent own between two and four acres and 44 percent own four or more acres.

Poverty status and cluster location are not strongly correlated with the distribution of households by the area of land (in hectares) owned by the households.

Regarding household size, while 36 percent of households with one or two members are landless, the share for households with seven or more members is 9 percent. In contrast, larger households seem to own larger landholdings more frequently than households with less members.

While households where the main income earner is an employee reported the highest share of landless households (47 percent), the share for households where the main

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

	Principal contributor of income				
	Head	Spouse	Child	Other	Total
Total	88.3	5.0	4.6	2.1	100.0
Cluster Location					
Accessible	89.6	3.7	4.8	2.0	100.0
Remote	86.4	6.8	4.4	2.3	100.0
Poverty Status					
Poor	80.8	8.2	8.7	2.3	100.0
Non-poor	91.4	3.6	2.9	2.1	100.0
Household size					
1-2	90.0	3.5	0.0	6.5	100.0
3-4	88.7	3.8	4.8	2.8	100.0
5-6	90.6	3.3	4.3	1.8	100.0
7+	86.1	7.2	6.1	0.7	100.0
Socio-economic Group					
Employee	96.1	3.9	0.0	0.0	100.0
Self-employed - agric	93.0	2.6	3.0	1.4	100.0
Self-employed - other	96.3	3.7	0.0	0.0	100.0
Other	5.0	40.4	37.3	17.3	100.0
Gender of the head of household					
Male	89.8	6.3	2.9	1.1	100.0
Female	82.6	0.0	11.1	6.3	100.0

Source:CWIQ 2007 Maswa DC

income earner belongs to the 'self-employed other' socio-economic group is 12 percent. Finally, male-headed households have larger landholdings (4 or more acres) compared to female-headed households at 49 and 26 percent respectively.

6.4.2 Cattle Ownership

Table 6.14 shows the percent distribution of households by the number of cattle owned. The majority (58 percent) of households owns no cattle at all, and only 7 percent owns more than 20 heads of cattle. Households in accessible clusters are more likely to own no cattle as well as households with one or two members. In contrast, households with seven or more members are more likely to have some cattle (between 2 and 10 heads) compared to households with one or two members, at 29 and 5 percent respectively. Finally, while 68 percent of female-headed households own no cattle, the share of male-headed households is 55 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

39 percent the households reported it was improving, 51 percent said it was the same and only 3 percent reported it was deteriorating. The percentage of households located in remote clusters who reported the current crime and security situation as improving is higher than that of households located in accessible clusters at 42 and 36 percent respectively. There appears to be no strong correlation between poverty status and the perception of households in the current crime and security situation of the community compared to the year before the survey.

While 86 percent of households with one or two members reported an improvement in the current crime and security situation, the share for households with five or six

Table 6.17: Percentage of households owning selected household items

	Electric iron	Refrigerator	Sewing machine	Modern stove	Mattress or bed	Watch or clock	Radio	Televison	Fixed line phone	Mobile phone
Total	21.7	1.1	3.2	4.8	79.2	37.0	48.4	2.1	0.0	11.3
Cluster Location										
Accessible	21.6	1.9	4.9	7.0	82.4	42.0	52.4	3.6	0.0	14.3
Remote	21.8	0.0	0.8	1.7	74.8	29.9	42.8	0.0	0.0	7.1
Poverty Status										
Poor	7.9	0.0	1.3	6.4	58.6	22.1	20.9	0.0	0.0	1.8
Non-poor	27.5	1.5	4.0	4.1	88.0	43.2	60.0	3.0	0.0	15.3
Household size										
1-2	4.4	0.0	0.0	1.6	66.4	21.5	34.9	3.3	0.0	9.5
3-4	19.5	2.7	0.9	4.5	78.8	35.3	49.7	2.7	0.0	10.3
5-6	24.7	0.0	3.0	5.8	82.9	38.3	47.5	1.0	0.0	11.3
7+	26.4	1.0	5.8	5.2	81.0	41.8	52.1	2.0	0.0	12.4
Socio-economic Group										
Employee	58.9	5.8	14.7	7.0	100.0	82.0	88.6	17.0	0.0	86.6
Self-employed - agric	18.2	0.0	2.2	4.9	76.4	32.0	44.2	0.5	0.0	4.5
Self-employed - other	49.6	12.5	10.0	0.0	100.0	58.6	79.3	12.5	0.0	40.5
Other	6.2	0.0	0.0	4.9	78.4	41.5	37.4	0.0	0.0	4.9
Gender of the head of household										
Male	21.3	0.9	2.3	5.2	80.9	38.4	52.2	1.7	0.0	11.3
Female	23.4	1.8	6.9	3.2	72.8	31.6	34.2	3.7	0.0	11.3

Source:CWIQ 2007 Maswa DC

members is 32 percent. Furthermore, 51 percent of households owning no land reported the current crime and security situation as improving compared to 37 percent of households with seven or more members. While 13 percent of households owning both small and large livestock reported deterioration in the current crime and security situation, the share for households owning small livestock only is 5 percent.

Furthermore, 13 percent of female-headed households reported the current crime and security situation to be deteriorating compared to 8 percent of male-headed households. While 50 percent of households where the household head is single reported an improvement in the current crime and security situation, the share for households where the head is widowed, divorced or separated is 37 percent. On the other hand, while 11 percent of households where the main income earner belongs to the 'employee' category reported a worse crime and security situation, the share of households where the main income earner is self-employed in non-agricultural activities is virtually null. Lastly, the percentage of households where the head has secondary or more education and reported deterioration of the current crime and security situation is higher than that of household heads with no education, at 17 and 10 percent respectively.

6.6 Household Income Contributions

Table 6.16 shows the percent distribution of households by main contributor to household income. The survey includes information on household income contributions by listing all the income contributors in the households and then identifying the household member who contributes the largest portion. For the great majority (88 percent) of households the head is the main contributor.

91 percent of non-poor households reported the household head as the main income contributor compared to 81 percent of poor households. Cluster location is not strongly correlated with the distribution of households by principal contributor to the household income.

While 6 percent of households with seven or more members reported children as the main income contributor, the share for households with one or two members is virtually null. Furthermore, almost all (96 percent) households belonging to the 'employee' and the 'self-employed other' categories reported the head as the main

income contributor compared to only 5 percent of households belonging to the 'other' category.

The breakdown by gender of the household head shows that up to 11 percent of female-headed households reported the child as the main income contributor, while the share for male-headed households in this case is virtually null.

6.7 Other Household Items

Table 6.17 shows the percentage distribution of households owning selected household items. 79 percent of households own at least one mattress or bed, 48 percent own a radio, 37 percent own a watch or clock and 22 percent own an electric iron. Although no household owns a fixed line phone, 11 percent own a mobile phone. Non-poor households and households in accessible clusters have higher rates of ownership in almost every selected item than their counterparts.

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

6 Perceptions on welfare and changes within communities

7 HOUSEHOLD AMENITIES

This chapter analyses the main amenities of the households in Maswa 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, 52 percent of households have thatch as their main roof material, 31 percent have thatch and 17 percent have mud.

The breakdown by cluster location shows that households in remote villages are more likely to use mud than households in accessible villages. In turn, the breakdown by poverty status shows that poor households tend to use thatch more often, and non-poor households, iron sheets.

The breakdown by household size shows that the largest households (7 or more members) tend to use mud and thatch less frequently, and iron sheets more frequently than the other households. The split-up by socio-economic group shows that the employees and the self-employed in non-agricultural activities report the lowest shares of use of mud and the highest shares of use of iron sheets, while the self-employed in agriculture and the 'other' category report the highest shares of use of thatch.

The breakdown by gender of the household head shows no strong differences in the material used for roofing.

Table 7.2 shows the distribution of households by type of material used in the walls. Overall, 93 percent of houses are built with mud or mud bricks, and 6 percent with cement or sandcrete.

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	16.9	51.6	0.0	31.2	0.0	0.0	0.0	0.2	100.0
Cluster Location									
Accessible	13.7	53.4	0.0	32.9	0.0	0.0	0.0	0.0	100.0
Remote	21.4	49.2	0.0	28.9	0.0	0.0	0.0	0.5	100.0
Poverty Status									
Poor	19.8	71.1	0.0	9.1	0.0	0.0	0.0	0.0	100.0
Non-poor	15.7	43.4	0.0	40.6	0.0	0.0	0.0	0.3	100.0
Household size									
1-2	20.7	54.1	0.0	25.2	0.0	0.0	0.0	0.0	100.0
3-4	16.3	52.6	0.0	31.1	0.0	0.0	0.0	0.0	100.0
5-6	18.2	55.2	0.0	26.7	0.0	0.0	0.0	0.0	100.0
7+	15.5	48.1	0.0	35.9	0.0	0.0	0.0	0.5	100.0
Socio-economic Group									
Employee	2.0	20.5	0.0	77.5	0.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	18.9	54.3	0.0	26.5	0.0	0.0	0.0	0.3	100.0
Self-employed - other	5.2	36.9	0.0	57.9	0.0	0.0	0.0	0.0	100.0
Other	15.3	58.0	0.0	26.7	0.0	0.0	0.0	0.0	100.0
Gender of the head of household									
Male	17.1	52.0	0.0	30.6	0.0	0.0	0.0	0.3	100.0
Female	16.4	50.0	0.0	33.6	0.0	0.0	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

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

	Mud/ mud bricks	Stone	Burnt bricks	Cement/ sandcrete	Wood/ bamboo	Iron sheets	Cardboard	Total
Total	92.7	0.2	0.7	6.1	0.2	0.0	0.0	100.0
Cluster Location								
Accessible	88.6	0.0	1.2	9.8	0.4	0.0	0.0	100.0
Remote	98.5	0.5	0.0	1.0	0.0	0.0	0.0	100.0
Poverty Status								
Poor	96.0	0.7	0.0	2.6	0.7	0.0	0.0	100.0
Non-poor	91.4	0.0	1.0	7.6	0.0	0.0	0.0	100.0
Household size								
1-2	93.2	0.0	0.0	6.8	0.0	0.0	0.0	100.0
3-4	92.4	0.8	1.2	5.5	0.0	0.0	0.0	100.0
5-6	92.6	0.0	0.0	6.5	0.9	0.0	0.0	100.0
7+	92.9	0.0	1.0	6.1	0.0	0.0	0.0	100.0
Socio-economic Group								
Employee	42.2	0.0	5.8	52.0	0.0	0.0	0.0	100.0
Self-employed - agriculture	96.7	0.3	0.5	2.3	0.3	0.0	0.0	100.0
Self-employed - other	81.3	0.0	0.0	18.7	0.0	0.0	0.0	100.0
Other	96.9	0.0	0.0	3.1	0.0	0.0	0.0	100.0
Gender of the head of household								
Male	93.9	0.3	0.0	5.8	0.0	0.0	0.0	100.0
Female	88.2	0.0	3.4	7.4	1.0	0.0	0.0	100.0

Source:CWIQ 2007 Maswa 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	91.9	0.0	0.0	7.9	0.0	0.2	100.0
Cluster Location							
Accessible	88.0	0.0	0.0	12.0	0.0	0.0	100.0
Remote	97.2	0.0	0.0	2.3	0.0	0.5	100.0
Poverty Status							
Poor	95.9	0.0	0.0	3.4	0.0	0.7	100.0
Non-poor	90.1	0.0	0.0	9.9	0.0	0.0	100.0
Household size							
1-2	93.3	0.0	0.0	6.7	0.0	0.0	100.0
3-4	90.5	0.0	0.0	8.7	0.0	0.8	100.0
5-6	95.1	0.0	0.0	4.9	0.0	0.0	100.0
7+	90.3	0.0	0.0	9.7	0.0	0.0	100.0
Socio-economic Group							
Employee	30.5	0.0	0.0	69.5	0.0	0.0	100.0
Self-employed - agriculture	97.1	0.0	0.0	2.6	0.0	0.3	100.0
Self-employed - other	71.3	0.0	0.0	28.7	0.0	0.0	100.0
Other	96.9	0.0	0.0	3.1	0.0	0.0	100.0
Gender of the head of household							
Male	92.9	0.0	0.0	6.9	0.0	0.3	100.0
Female	88.0	0.0	0.0	12.0	0.0	0.0	100.0

Source:CWIQ 2007 Maswa DC

The analysis of cluster location reveals that households in remote villages have a higher share of mud and mud bricks than households in accessible villages. The rates are 99 and 89 percent, respectively. Likewise, poor households use mud or mud bricks more often than non-poor households (96 and 91 percent, respectively), while non-poor households report a higher share of use of sandcrete, at 8 percent against 3 percent of poor households.

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

	Single room	Flat	Two or more rooms	Whole building	Other	Total
Total	1.7	0.0	1.8	67.6	28.9	100.0
Cluster Location						
Accessible	3.0	0.0	2.3	66.5	28.3	100.0
Remote	0.0	0.0	1.1	69.2	29.7	100.0
Poverty Status						
Poor	0.0	0.0	0.0	61.9	38.1	100.0
Non-poor	2.4	0.0	2.5	70.0	25.0	100.0
Household size						
1-2	10.0	0.0	5.3	84.7	0.0	100.0
3-4	2.2	0.0	3.3	75.2	19.2	100.0
5-6	0.0	0.0	1.3	74.0	24.7	100.0
7+	0.0	0.0	0.0	53.7	46.3	100.0
Socio-economic Group						
Employee	7.0	0.0	11.3	74.9	6.8	100.0
Self-employed - agric	0.7	0.0	1.1	68.9	29.3	100.0
Self-employed - other	12.5	0.0	3.8	59.9	23.9	100.0
Other	0.0	0.0	0.0	50.2	49.8	100.0
Gender of the head of household						
Male	0.7	0.0	1.7	68.5	29.1	100.0
Female	5.5	0.0	2.2	64.2	28.0	100.0

Source:CWIQ 2007 Maswa DC

There are no remarkable differences by size of the household. In turn, the breakdown by socio-economic group shows that the employees report the highest share of households using cement or sandcrete (52 percent) followed by the self-employed in non-agricultural activities (19 percent). In turn, the self-employed in agriculture an the 'other' socio-economic group report the highest share of use of mud or mud bricks, at 97 percent each.

The gender breakdown shows that households headed by males use mud or mud bricks more often than female-headed households, at rates of 94 and 88 percent, respectively.

The distribution of households by type of material used in the floor is shown in Table 7.3. Overall, the floor in 92 percent of households is made of mud or dirt, and 8 percent of concrete or cement.

The breakdown by cluster location shows that households in accessible villages, with a rate of 12 percent, have a higher share of houses with concrete floor than households in remote villages, with a rate of 2 percent. In turn, the latter report a higher share of households with dirt floor than the former. Similar differences are observed by poverty status, with poor households resembling remote villages.

There are no clear differences by number of members of the household. The split-up by socio-economic group of the shows that the self-employed in agriculture and the 'other' category report the highest shares of households with dirt-floor, followed by the self-employed in non-agricultural activities at 71 percent. The figure for the employees is just 31 percent. The reverse ordering is observed in the use of concrete or cement.

Finally, households headed by males have a higher share of mud or dirt floor than female-headed households at 93 and 88 percent, respectively. In turn, 12 percent of female-headed households have concrete or cement flooring, against 7 percent of male-headed households.

Table 7.4 shows the percent distribution of households by type of housing unit they occupy. Overall, 68 percent of households occupy the whole building where they live, 2 percent occupy a single room, 2 percent two or more rooms, and 29 percent have other types of housing unit.

There are no substantial differences by cluster location, but the breakdown by poverty status shows that non-poor

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	0.8	3.4	46.4	0.3	7.8	0.0	40.2	1.1	0.0	100.0	47.5
Cluster Location											
Accessible	1.4	5.7	44.9	0.5	10.2	0.0	35.3	1.9	0.0	100.0	46.9
Remote	0.0	0.3	48.3	0.0	4.5	0.0	47.0	0.0	0.0	100.0	48.3
Poverty Status											
Poor	0.0	3.0	39.5	0.0	10.2	0.0	47.2	0.0	0.0	100.0	39.5
Non-poor	1.2	3.6	49.2	0.4	6.8	0.0	37.3	1.5	0.0	100.0	50.8
Household size											
1-2	5.4	3.3	37.5	0.0	7.1	0.0	43.4	3.3	0.0	100.0	42.8
3-4	0.8	4.9	47.5	0.0	8.1	0.0	37.5	1.2	0.0	100.0	48.3
5-6	0.0	3.1	49.2	1.3	4.0	0.0	42.4	0.0	0.0	100.0	50.5
7+	0.0	2.7	46.5	0.0	10.1	0.0	39.7	1.0	0.0	100.0	46.5
Socio-economic Group											
Employee	0.0	12.5	37.8	5.5	0.0	0.0	31.4	12.7	0.0	100.0	43.4
Self-employed - agric	0.5	2.4	46.7	0.0	8.8	0.0	41.6	0.0	0.0	100.0	47.3
Self-employed - other	6.2	12.5	50.7	0.0	0.0	0.0	24.3	6.2	0.0	100.0	56.9
Other	0.0	0.0	44.8	0.0	9.5	0.0	45.7	0.0	0.0	100.0	44.8
Gender of the head of household											
Male	0.0	2.8	50.3	0.4	7.6	0.0	38.5	0.4	0.0	100.0	50.7
Female	4.0	5.8	31.4	0.0	8.4	0.0	46.6	3.7	0.0	100.0	35.5

Source:CWIQ 2007 Maswa DC

households report a higher share occupying the whole building, while poor households report a higher share with 'other' types of housing unit.

Households with up to 2 members report the highest shares occupying a single room (10 percent) and the whole building (85 percent), while households with 7 or more members report the highest share occupying other types of housing units, at 46 percent.

The analysis of socio-economic groups shows that the self-employed in non-agricultural activities report the highest share occupying a single room at 13 percent, followed by the employees at 7 percent. The latter are the most likely to occupy two or more rooms in a building, and households in the 'other' category are the most likely to occupy other types of housing unit. The employees report the highest share occupying the whole building, at 75 percent, followed by the self-employed in agriculture at 69 percent and the self-employed in non-agricultural activities at 60 percent. The figure for the 'other' category is just 50 percent.

Finally, there are no remarkable differences by gender of the household head.

The percentage distribution of households by source of drinking water is shown in

7.2 Water and Sanitation

Table 7.5. Overall, 48 percent of households have a safe source of water, whereas 8 percent of them get it from an unprotected well and 40 percent 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 no strong differences in the share of households with safe sources of water. The shares of households that get drinking water from a river, lake or pond is higher in remote villages, at 47 percent, against 35 percent of accessible villages.

Poverty status of the household shows important differences in access to safe water. 51 percent of non-poor households use safe sources of water, against 40 percent of poor households.

When analysing by household size, it is clear that the smallest households report the holes share getting water from bore holes or hand pumps, and the highest share getting it from a river, lake or pond.

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	39.7	0.0	2.9	0.0	51.2	6.2	0.0	0.0	100.0	54.1
Cluster Location										
Accessible	40.9	0.0	5.0	0.0	48.8	5.3	0.0	0.0	100.0	53.8
Remote	38.0	0.0	0.0	0.0	54.5	7.5	0.0	0.0	100.0	54.5
Poverty Status										
Poor	62.4	0.0	1.3	0.0	32.1	4.2	0.0	0.0	100.0	33.4
Non-poor	30.1	0.0	3.6	0.0	59.2	7.1	0.0	0.0	100.0	62.9
Household size										
1-2	43.9	0.0	3.3	0.0	44.3	8.5	0.0	0.0	100.0	47.6
3-4	46.7	0.0	2.7	0.0	45.0	5.5	0.0	0.0	100.0	47.8
5-6	38.8	0.0	1.3	0.0	53.1	6.8	0.0	0.0	100.0	54.4
7+	34.4	0.0	3.9	0.0	56.0	5.6	0.0	0.0	100.0	60.0
Socio-economic Group										
Employee	9.4	0.0	25.2	0.0	65.4	0.0	0.0	0.0	100.0	90.6
Self-employed - agric	40.9	0.0	0.9	0.0	50.6	7.5	0.0	0.0	100.0	51.6
Self-employed - other	27.4	0.0	12.5	0.0	60.1	0.0	0.0	0.0	100.0	72.6
Other	63.8	0.0	0.0	0.0	36.2	0.0	0.0	0.0	100.0	36.2
Gender of the head of household										
Male	39.0	0.0	2.2	0.0	53.4	5.3	0.0	0.0	100.0	55.6
Female	42.0	0.0	5.5	0.0	42.8	9.6	0.0	0.0	100.0	48.3

Source:CWIQ 2007 Maswa DC

The breakdown by socio-economic group shows that the employees report the lowest share of households obtaining water from bore holes or hand pumps, while the self-employed in non-agricultural activities and the 'other' category report the highest shares getting water from unprotected wells, at 9 and 10 percent, respectively. The latter report the highest share of households getting water from a river, lake or pond, at 46 percent, followed by the self-employed in agriculture at 42 percent, the employees at 31 percent, and the self-employed in non-agricultural activities at 24 percent.

Table 7.6 shows the percentage distribution of households by main type of toilet. Only 54 percent of households have safe sanitation, whereas up to 40 percent have no toilet.

The cluster breakdown shows no strong differences in the share of households with safe sanitation. The analysis by poverty status shows that 63 percent of non-poor households have safe sanitation compared to 33 percent of poor households.

The breakdown by household size shows that the share of households with safe sanitation is inversely correlated with the number of household members. Households with 1 to 2 and with 3 to 4 members have the lowest percentage of safe sanitation, at 48 percent. In the other extreme, households with 7 or more members have the highest share, with 60 percent of households with safe sanitation. The share for households with 5 or 6 members is slightly lower, at 54 percent.

The breakdown by socio-economic status shows that the employees have highest rate of safe sanitation, at 91 percent, followed by the self-employed in non-agricultural activities at 73 percent. The self-employed in agriculture come in third place, with a rate of 52 percent. The 'other' socio-economic group reports the lowest rate, at only 36 percent.

The analysis by gender of the household heads reveals that male-headed households are more likely to have safe sanitation than female-headed households.

7.3 Type of Fuel

Table 7.7 shows the distribution of households by fuel used for cooking. Overall, 92 percent of households use firewood and 8 percent use charcoal.

Remote villages use firewood more often than accessible households, at 98 and 88 percent, respectively. In turn, the latter

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	92.1	7.9	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Cluster Location										
Accessible	87.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Remote	98.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Poverty Status										
Poor	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Non-poor	88.7	11.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Household size										
1-2	84.9	15.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
3-4	91.2	8.8	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
5-6	91.3	8.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7+	95.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Socio-economic Group										
Employee	42.0	58.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Self-employed - agric	96.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Self-employed - other	71.2	28.8	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	94.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Female	84.8	15.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0

Source:CWIQ 2007 Maswa DC

report using charcoal more often than the former, at 13 and 2 percent, respectively. Similar differences are observed by poverty status, with poor households resembling remote villages.

The breakdown by household size shows that the smallest households (with up to 2 members) use charcoal more often than the rest, at 15 percent and firewood less often, at 85 percent.

The breakdown by socio-economic group shows that virtually all the households in the 'other' category use firewood, followed by the self-employed in agriculture at 96 percent. The self-employed in non-agricultural activities come third with a rate of 71 percent and the employees report the lowest use of firewood at 42 percent. The reverse ordering is observed in the use of charcoal

The breakdown by gender of the household head shows that male-headed households report a higher share using firewood than female-headed households at 94 and 85 percent, respectively. In turn, the latter report a higher use of charcoal than the former at 15 and 6 percent, respectively.

Table 7.8 shows the distribution of households according to the fuel used for lightning. Overall, 89 percent of the households in the district uses kerosene or paraffin, 7 percent firewood and just 4 percent uses electricity. Gas, solar panels, batteries, and candles are virtually not used for lighting in the district.

The breakdown by cluster location shows that accessible villages report a higher share of households using electricity (6 vs. 0 percent), and a lower share using firewood (4 vs. 10 percent) than remote villages. The breakdown by poverty status shows similar differences, with non-poor households resembling accessible villages.

The breakdown by household size reveals that in households with up to 2 members, firewood is more likely to be used as source of lighting than in the remaining households. In parallel, in these households kerosene and paraffin are less likely to be used for lightning.

The analysis by socio-economic group shows that the employees report the highest share of households using electricity (30 percent) followed by the self-employed in non-agricultural activities (19 percent), while the remaining categories report null rates of

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	89.4	0.0	3.6	0.2	0.0	0.0	6.7	0.0	100.0
Cluster Location									
Accessible	89.1	0.0	6.2	0.4	0.0	0.0	4.2	0.0	100.0
Remote	89.8	0.0	0.0	0.0	0.0	0.0	10.2	0.0	100.0
Poverty Status									
Poor	86.1	0.0	0.0	0.0	0.0	0.0	13.9	0.0	100.0
Non-poor	90.8	0.0	5.1	0.3	0.0	0.0	3.7	0.0	100.0
Household size									
1-2	76.3	0.0	6.7	0.0	0.0	0.0	17.1	0.0	100.0
3-4	92.4	0.0	4.2	0.0	0.0	0.0	3.3	0.0	100.0
5-6	90.6	0.0	2.9	1.0	0.0	0.0	5.5	0.0	100.0
7+	90.6	0.0	2.7	0.0	0.0	0.0	6.6	0.0	100.0
Socio-economic Group									
Employee	65.0	0.0	30.8	4.3	0.0	0.0	0.0	0.0	100.0
Self-employed - agric	91.0	0.0	0.9	0.0	0.0	0.0	8.0	0.0	100.0
Self-employed - other	81.3	0.0	18.7	0.0	0.0	0.0	0.0	0.0	100.0
Other	98.8	0.0	0.0	0.0	0.0	0.0	1.2	0.0	100.0
Gender of the head of household									
Male	91.1	0.0	2.6	0.3	0.0	0.0	5.9	0.0	100.0
Female	83.0	0.0	7.4	0.0	0.0	0.0	9.7	0.0	100.0

Source:CWIQ 2007 Maswa DC

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

	Drinking water supply					Health facility				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	40.5	38.4	16.7	4.4	100.0	8.6	13.5	27.2	50.7	100.0
Cluster Location										
Accessible	42.4	41.8	12.2	3.6	100.0	12.3	15.3	27.3	45.1	100.0
Remote	37.8	33.7	23.0	5.4	100.0	3.4	11.1	27.2	58.3	100.0
Poverty Status										
Poor	34.0	43.7	18.2	4.1	100.0	4.5	12.7	21.9	60.9	100.0
Non-poor	43.2	36.2	16.1	4.5	100.0	10.3	13.9	29.5	46.3	100.0
Household size										
1-2	48.1	33.0	12.9	6.0	100.0	9.3	22.5	9.4	58.9	100.0
3-4	39.3	44.1	13.4	3.1	100.0	9.1	12.3	33.1	45.5	100.0
5-6	39.1	33.0	21.1	6.8	100.0	6.9	13.5	31.7	47.8	100.0
7+	39.8	39.6	17.4	3.3	100.0	9.0	11.7	26.0	53.3	100.0
Socio-economic Group										
Employee	51.6	25.8	22.6	0.0	100.0	32.0	25.8	26.8	15.4	100.0
Self-employed - agric	40.4	39.4	15.3	4.9	100.0	6.6	13.2	27.8	52.4	100.0
Self-employed - other	37.0	38.0	25.0	0.0	100.0	18.7	12.5	31.1	37.6	100.0
Other	34.7	37.3	22.3	5.7	100.0	3.1	8.1	15.6	73.2	100.0
Gender of the head of household										
Male	39.9	38.8	17.2	4.1	100.0	6.2	12.8	29.3	51.7	100.0
Female	42.6	37.1	14.9	5.3	100.0	17.7	16.3	19.3	46.7	100.0

Source:CWIQ 2007 Maswa DC

use of electricity. The self-employed in agriculture report the highest share using firewood (8 percent), while the employees report the lowest share using kerosene or paraffin (65 percent).

Finally, female-headed households are less likely to use kerosene or paraffin tan male-headed households, with shares of 83 and 91 percent, respectively.

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

	Primary school					Secondary school				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	29.1	23.5	29.1	18.3	100.0	4.6	12.5	25.6	57.3	100.0
Cluster Location										
Accessible	36.0	18.3	26.8	18.8	100.0	7.2	17.1	26.3	49.5	100.0
Remote	19.6	30.7	32.3	17.5	100.0	1.0	6.2	24.7	68.1	100.0
Poverty Status										
Poor	21.0	21.0	32.2	25.7	100.0	1.4	10.4	21.7	66.5	100.0
Non-poor	32.5	24.5	27.8	15.1	100.0	6.0	13.4	27.2	53.4	100.0
Household size										
1-2	36.5	15.3	29.4	18.7	100.0	4.2	7.8	21.7	66.3	100.0
3-4	33.9	28.7	23.3	14.1	100.0	7.0	15.6	23.5	53.8	100.0
5-6	28.6	21.4	34.4	15.6	100.0	4.6	10.1	28.3	57.1	100.0
7+	24.1	23.8	29.6	22.5	100.0	3.2	13.3	26.5	57.0	100.0
Socio-economic Group										
Employee	67.2	14.2	13.1	5.5	100.0	30.4	14.8	32.9	21.9	100.0
Self-employed - agric	26.2	22.1	32.9	18.7	100.0	2.8	12.8	24.8	59.6	100.0
Self-employed - other	47.7	34.5	4.7	13.2	100.0	10.8	17.9	32.6	38.8	100.0
Other	14.3	40.1	16.0	29.5	100.0	0.0	0.0	23.2	76.8	100.0
Gender of the head of household										
Male	26.0	25.3	30.1	18.6	100.0	4.0	13.5	25.7	56.8	100.0
Female	41.1	16.6	25.3	17.1	100.0	6.9	8.8	25.1	59.3	100.0

Source:CWIQ 2007 Maswa 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. 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, 79 percent of households are located under 30 minutes of a drinking water supply. In addition, 22 percent of the households are located under 30 minutes of a health facility.

The breakdown by cluster location shows that 84 percent of households in accessible villages have access to a drinking water source and 28 percent to a health facility, whereas the shares for households in remote villages are 72 and 15 percent.

The breakdown by poverty status shows no remarkable difference in access to drinking water, but non-poor households have a higher access rate to healthcare facilities.

The breakdown by household size shows that the smallest households (1 or 2 members) have the highest rates of access to health facilities, while there are no substantial differences in the access rates to drinking water.

The employees report the highest rate of access to healthcare facilities, while the 'other' socio-economic group reports the lowest rates of access to drinking water and healthcare facilities.

The breakdown by gender of the household head shows no strong differences in access to water sources, but households headed by females have a higher access rate to health facilities, with 34 percent living less than 30 minutes of health facilities, 15 percentage points above female-headed households.

Table 7.10 shows the percent distribution of households by time to reach the nearest primary and secondary school. Overall, 53 percent of households are located within 30 minutes of a primary school, but just 17 percent of households live within 30 minutes of a secondary school. Access to

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

	Food market					Public transportation				
	<= 15	16-30	31-60	61+	Total	<= 15	16-30	31-60	61+	Total
Total	16.6	14.3	26.0	43.2	100.0	25.9	23.3	27.6	23.3	100.0
Cluster Location										
Accessible	27.1	9.5	26.8	36.6	100.0	37.4	20.3	24.8	17.6	100.0
Remote	2.0	20.8	24.8	52.3	100.0	9.9	27.4	31.5	31.2	100.0
Poverty Status										
Poor	12.8	7.4	24.5	55.3	100.0	16.4	23.1	30.1	30.4	100.0
Non-poor	18.2	17.2	26.6	38.1	100.0	29.8	23.3	26.5	20.3	100.0
Household size										
1-2	19.0	11.3	18.3	51.4	100.0	35.7	17.2	22.8	24.3	100.0
3-4	23.8	18.1	16.7	41.4	100.0	32.3	22.6	22.6	22.5	100.0
5-6	8.6	19.4	31.5	40.5	100.0	18.8	27.7	30.5	23.0	100.0
7+	16.1	9.5	30.9	43.5	100.0	23.1	22.7	30.5	23.7	100.0
Socio-economic Group										
Employee	42.5	24.5	17.1	16.0	100.0	66.7	11.8	11.8	9.8	100.0
Self-employed - agric	12.8	14.6	26.0	46.6	100.0	21.9	24.4	28.8	24.9	100.0
Self-employed - other	60.4	0.0	26.3	13.4	100.0	55.5	0.0	33.1	11.4	100.0
Other	0.0	14.3	33.4	52.3	100.0	11.9	42.5	20.1	25.5	100.0
Gender of head of household										
Male	15.7	14.9	26.6	42.8	100.0	24.8	22.1	29.0	24.1	100.0
Female	20.1	11.8	23.5	44.7	100.0	29.9	27.6	22.3	20.2	100.0

Source:CWIQ 2007 Maswa DC

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 no strong differences in the rate of access to primary school. However, accessible villages report a remarkably higher rate of access to secondary school than remote villages, at 24 and 7 percent, respectively.
The breakdown by poverty status shows that non-poor households have higher rates of access to primary and secondary schools, with rates of 57 and 19 percent against 42 and 12 percent of poor households, respectively.

Households with 3 to 4 members have the highest rate of access to primary and secondary schools. The employees and the self-employed in non-agricultural activities show the highest access rates to primary schools, followed by the 'other' socio-economic group. Regarding secondary school, the employees show the highest rate, followed by the self-employed in non-agricultural activities. The 'other' socio-economic group shows the lowest rate of access to secondary school, at virtually 0 percent.

The breakdown by socio-economic group shows that households in the category 'other' have the highest rates of access to primary and that employees have the highest rates of access to secondary schools, at 93 and 14 percent, respectively. Households in the category 'self-employed agriculture' have the lowest access rates to primary schools at 61 percent.

Households headed by females have higher access rates to primary school than male-headed households, at 58 percent, against 51 percent of males. There is no strong difference in the access to secondary school.

Table 7.11 shows the percent distribution of households by time to reach the nearest food market and public transportation. Overall, 31 percent of households have access to a food market, and 49 percent to public transportation.

The analysis of cluster location shows that 37 percent of households in accessible villages live within 30 minutes of a food market, against 23 percent of households in remote villages. The shares for public transportation are 58 for accessible and 37 percent for households in remote villages.

Poverty status is also strongly correlated with distance to food markets and public transportation. Poor households have lower rates of access to food markets, with a rate of 20 percent, against 35 percent of non-poor households. There is a similar difference regarding access to public transportation. While 53 percent of non-poor have access to public transportation, only 40 percent of poor have so.

The breakdown by size of the household shows that households with 3 to 4 members have the highest rates of access to food market, at 42 percent. Regarding public transport, households with up to 4 members show higher access rates than households with 5 or more members.

The employees have the highest rates of access to food markets and public transportation, with rates of 67 and 78 percent. The 'other' category reports the lowest access rate to food markets, while the self-employed in agriculture report the lowest access rate to public transportation.

There does not appear to be a difference according to the gender of the household head in access to food markets, but there is a strong difference in access to public transportation. Male-headed households have an access rate of 58 percent and female-headed households have a rate of 47 percent.

7.5 Anti-Malaria Measures

The percentage of households taking anti-malaria measures and the specific measures they take are shown in Table 7.12. Overall, 74 percent of households take measures against malaria. The most commonly taken measures are insecticide-treated nets (56 percent), bed-nets (31 percent), and maintenance of good sanitation (18 percent).

The analysis of cluster location shows that 68 percent of households in remote villages take measures against malaria, compared to 79 percent of households in accessible villages. The share of households taking measures is higher in accessible villages and in non-poor households. The use of insecticide-treated nets is also more common in accessible villages and non-poor households.

The share of households taking measures increases with the size of the household but there are no clear trends by measure taken. The analysis of socio-economic status shows that the self-employed in non-agricultural activities report the highest share of households taking measures (100 percent) followed by the employees (95 percent). The self-

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

	Share taking measures	Use bed net	Insect-icide	Anti-malaria drug	Fumi-gation	Insecticide treated net	Maintain good drainage	Maintain good sanitation	Herbs	Burn leaves	Window/ door net
Total	74.3	30.6	7.3	3.1	0.5	56.0	0.5	18.1	2.7	0.3	2.4
Cluster Location											
Accessible	79.0	30.1	9.7	2.1	0.8	58.8	0.7	19.4	1.3	0.5	3.9
Remote	67.8	31.6	3.4	4.8	0.0	51.6	0.3	16.1	5.0	0.0	0.0
Poverty Status											
Poor	59.9	33.7	9.2	3.5	0.0	43.2	0.0	18.5	5.3	0.0	0.0
Non-poor	80.4	29.7	6.7	3.0	0.7	60.1	0.7	18.0	1.9	0.4	3.1
Household size											
1-2	58.1	20.7	11.5	2.4	0.0	42.8	0.0	26.3	7.7	0.0	0.0
3-4	73.4	34.2	3.8	5.1	2.0	56.7	1.6	14.6	1.2	0.0	3.7
5-6	74.6	31.7	11.0	0.7	0.0	54.1	0.4	17.3	3.6	1.3	1.7
7+	79.5	30.0	6.3	3.5	0.0	59.6	0.0	19.0	2.1	0.0	2.5
Socio-economic Group											
Employee	94.5	6.3	11.5	0.0	0.0	89.5	0.0	30.0	0.0	4.5	19.3
Self-employed - agric	72.1	33.8	6.7	3.9	0.0	50.9	0.6	14.6	3.4	0.0	0.0
Self-employed - other	100.0	30.9	10.0	0.0	6.2	64.5	0.0	47.9	0.0	0.0	12.5
Other	60.0	13.2	5.2	0.0	0.0	79.5	0.0	8.9	0.0	0.0	0.0
Gender of the head of household											
Male	75.1	33.5	5.5	3.1	0.6	55.9	0.6	17.0	1.7	0.4	1.2
Female	71.5	19.1	14.2	3.3	0.0	56.5	0.0	22.7	7.0	0.0	7.3

Source:CWIQ 2007 Maswa DC

employed in agriculture show the third highest rate (72 percent) and the 'other' category shows the lowest, at 60 percent.

Finally, there are no strong differences in the share of households taking measures by gender of the household head. However, male-headed households report a higher share using bed-nets, while female-headed households report a higher share maintaining good sanitation to prevent malaria.

7 Household amenities

8 GOVERNANCE

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

8.1 Attendance at Meetings

Table 8.1 summarises responses to the following question "Did you or anyone in your household attend a meeting at [...] level in the past 12 months". This question was repeated 4 times with the dots replaced by kitongoji, village, ward and district. The results show that 84 percent of households had at least one member attending at least one kitongoji meeting in the past 12 months. The attendance rate at village meetings is similar, at 85 percent. Ward and district level meetings did not attain attendance of the majority of households at 22 and 5 percent respectively.

The breakdown by cluster location shows that remote villages report remarkably higher attendance rates at all levels except for district meetings. Looking at the breakdown of the results by poverty status, it can be seen that while there is no difference in attendance at kitongoji and village meetings, non-poor households seem to have better attendance rates at ward and district level meetings. Analysis of the results by socio-economic group shows that the employees report the lowest attendance rates at kitongoji and village meetings and the highest at ward and district meetings.

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

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	83.8	85.1	22.4	5.4
Cluster Location				
Accessible	80.3	81.8	19.1	4.2
Remote	88.7	89.7	27.1	7.1
Poverty Status				
Poor	82.4	86.0	14.0	2.2
Non-poor	84.5	84.8	26.0	6.8
Socio-economic Group				
Employee	61.3	71.2	44.2	25.4
Self-employed - agriculture	84.8	86.0	20.8	3.8
Self-employed - other	87.5	83.8	30.8	3.7
Other	87.9	88.0	16.7	11.6
No. of Obs.	450	450	450	450

Source:CWIQ 2007 Maswa DC

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

	Kitongoji Leaders	Village Leaders	Ward Leaders	District Leaders	District Councillor
Total					
Satisfied	89.8	80.5	73.0	64.0	69.4
Not Satisfied	8.8	17.0	14.1	6.0	29.7
Don't Know	1.4	2.5	12.8	30.0	0.9
Share Satisfied by Cluster Location					
Accessible	88.9	78.9	69.9	61.5	66.2
Remote	91.2	82.7	77.3	67.4	73.9
Share Satisfied by Poverty Status					
Poor	89.9	77.2	70.1	64.8	68.5
Non-poor	89.8	81.8	74.3	63.6	69.8
Share Satisfied by Socio-economic Group					
Employee	87.5	76.0	70.7	54.9	63.2
Self-employed - agriculture	90.1	81.2	73.0	66.0	68.6
Self-employed - other	94.6	71.2	83.6	65.0	88.1
Other	82.7	83.8	64.7	43.3	67.0
Reasons for Dissatisfaction (incl. don't know)					
Political differences	0.0	0.0	0.0	0.0	4.1
Embezzlement/corruption	17.5	28.7	17.6	1.5	14.0
They do not listen to people	17.2	31.4	17.8	2.6	22.6
Favouritism	41.5	30.5	11.5	0.0	10.3
Lazy/inexperienced	16.4	19.2	7.8	0.5	18.8
Personal Reasons	3.8	3.9	1.9	1.1	0.7
I see no results	25.7	29.7	17.6	8.1	49.5
They never visit us	3.7	17.4	47.5	88.7	57.0
No. of Obs.	450	450	450	450	450

Source:CWIQ 2007 Maswa 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?'

going up as the level of government goes down. While, respectively, 90 percent and 81 percent of respondents say they are satisfied with kitongoji and village leaders, only 73 and 64 percent, respectively, say the same of ward and district leaders. This does not, however, mean that respondents specifically reported dissatisfaction with leaders at higher levels of government. In fact, the percentage of people claiming they are dissatisfied with leaders does not differ much between kitongoji, village, ward and district leaders. Rather, the number of people responding 'I don't know' increases for higher levels of government. Just 6 percent of respondents were not satisfied with the work of their district leaders, while 64 percent was satisfied and 30 percent answered 'I don't know'.

Breaking the results down by accessibility of the cluster shows that respondents living in remote villages have higher satisfaction rates for the higher levels of government. In contrast, there are no strong differences by poverty status of the household.

Disaggregating the ratings by socio-economic group shows that the 'other' socio-economic category tends to report the lowest rates of satisfaction

Finally, all respondents who did not report that they were satisfied with the leaders at a certain level of government where asked why this was so. 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

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	9.5	20.1	4.2	3.4
Cluster Location				
Accessible	10.3	19.3	4.8	3.7
Remote	8.4	21.1	3.5	3.1
Poverty Status				
Poor	11.3	15.0	5.2	2.1
Non-poor	8.8	22.2	3.8	4.0
Socio-economic Group				
Employee	12.9	30.9	14.2	24.3
Self-employed - agriculture	9.4	19.8	3.5	2.5
Self-employed - other	10.0	16.2	10.0	0.0
Other	6.9	18.0	0.0	0.0
Source				
Letter	3.3	0.0	0.0	0.0
Notice board	0.0	2.8	7.5	52.1
Meeting	83.5	94.5	65.9	37.4
Rumours/hear-say	11.3	6.6	17.9	32.0
Radio/newspapers	0.0	0.0	0.0	8.4
No. of Obs.	450	450	450	450

Source:CWIQ 2007 Maswa DC

they were satisfied with their leaders at the specified level.

The reasons for dissatisfaction are very different across the different levels of government. The main reason for dissatisfaction at kitongoji level was favouritism (42 percent), followed by 'I see no results' (26 percent). In the case of village leaders, the most important reasons were embezzlement/corruption (29 percent), 'they do not listen to people' (31 percent), favouritism (31 percent), and seeing no results (30 percent). The main reason for dissatisfaction with ward and district leaders were their failure to visit people, at 48 and 89 percent, respectively. Finally, the most cited reasons for dissatisfaction with the district councillor were seeing no results and failure to visit people.

8.3. Public Spending

This section discusses the results of questions on the extent to which financial information reached the sample of respondent, as well as their satisfaction with public spending. Table 8.3 shows the distribution of the percentage of respondents that reported having received financial information from four different levels of government. Information on village finances seems to reach the largest share of households at 20 percent. Information on kitongoji, ward and district finances reaches 10, 4 and 3 percent of the households, respectively.

The breakdown by cluster location does not yield wide differences. In turn, the breakdown by poverty status shows that non-poor households report a higher share receiving information on village finances, with no strong differences at the other levels of government.

The breakdown by socio-economic group shows that the employees report the highest rates at all levels of government, while the other category tends to report the lowest shares.

For those that received financial information, the source of this information was probed for. The results in Table 8.3 show that at all levels of government the most important method of acquiring information was attendance of meetings, followed by rumours or hear. The exception is notice boards, which is the most common source of information on district finances.

Respondents were asked whether they were satisfied with spending at different levels of government and were requested to respond either 'yes', 'no' or 'don't know'. Table 8.4 shows the results. Satisfaction with spending is higher for lower levels of government. While around 53 and 50 percent of respondents, respectively, were satisfied with village and kitongoji spending, only 38 and 32 percent, respectively, and reported the same for ward and district spending. However, this does not mean that respondents specifically reported dissatisfaction with spending for higher levels of government, but rather that the share of respondents reporting 'I don't know' increases, from 28 percent at kitongoji level to 57 percent at district spending.

Respondents living in remote villages tend to show higher satisfaction rates than respondents living in accessible villages. The breakdown by poverty status shows that non-poor households report higher satisfaction rates with village and ward spending. The breakdown by socio-economic group shows that the employees display the highest satisfaction rates, while the 'other' socio-economic group reports the lowest shares.

When respondents were further queried why they were not satisfied, or why they did not know whether they were satisfied, the most common response was that they did not receive any information. This was followed by seeing no results and embezzlement/corruption.

Table 8.4: Satisfaction with public spending and reasons for dissatisfaction

	Kitongoji Spending	Village Spending	Ward Spending	District Spending
Total				
Satisfied	52.5	49.7	37.9	32.0
Not Satisfied	20.0	26.6	27.1	10.9
Don' Know	27.5	23.8	35.0	57.1
Share Satisfied by Cluster Location				
Accessible	50.4	48.7	35.0	30.1
Remote	55.4	51.0	42.0	34.6
Share Satisfied by Poverty Status				
Poor	52.3	42.8	29.1	28.7
Non-poor	52.6	52.6	41.6	33.4
Share Satisfied by Socio-economic Group				
Employee	58.6	62.7	52.9	55.5
Self-employed - agriculture	52.8	50.7	39.2	32.7
Self-employed - other	54.6	41.4	27.2	17.5
Other	39.7	31.2	16.5	15.4
Reasons for Dissatisfaction (incl. don't know)				
I see no results	17.9	24.3	19.3	8.1
Embezzlement/corruption	10.8	30.4	22.4	5.4
Favouritism	1.6	0.9	1.3	0.3
This is what I hear	2.2	4.0	6.0	1.2
They give no information	69.0	72.0	79.8	92.3
No. of Obs.	450	450	450	450

Source:CWIQ 2007 Maswa DC

9 CHANGES BETWEEN 2004 AND 2007

This chapter will use the results of the 2004 Maswa DC CWIQ to analyse changes in a selected set of indicators between the two surveys. Both the sampling methodology and the structure of the questionnaires allow comparisons between the surveys. 't' tests were performed to ensure statistical significance of the changes that take into account the clustered nature of the dataset. The null hypothesis in all cases was equality of means, so rejection of the null implies that the means are statistically different. These tests rely on two assumptions: normality of the distribution of each variable in the population and equality of variance in both samples. Violation of the first assumption does not pose serious problems in practice. Regarding the second assumption, one may be willing to assume equal variance between the two samples if it is considered that both are representative of the same population in two relatively close points in time.

Being estimates, the changes should not be read as points, but from the corresponding confidence intervals. For instance, Table 9.3 shows that rate of need of healthcare increased by 9 percent, and that the confidence interval of the change runs from 5.7 to 12.8 percent. This should be read: 'rate of need of healthcare increased by between 5.7 and 12.8 percent, at the 95 percent of confidence'. If the confidence interval includes zero, it is said that the change is non-significant. For the sake of space, the tables only show the 95 percent confidence intervals. However, some researchers or policy makers may prefer 90 or 99 percent confidence intervals. Although they are not presented in the tables, stars indicate the significance level of each change. *, **, and *** represent significance at the 90, 95 and 99 percent of confidence. The text only discusses changes at the 95 percent of confidence.

Some caveats must be pointed out. In first place, the sample is not a panel, i.e. the households interviewed in 2004 were not re-interviewed interviewed in 2007. Therefore, only the overall changes can be analysed, not the evolution for individual households. For instance, as shown in Table 9.4, the share of population owning only small livestock did not change significantly between the two surveys. It must be kept in mind that this result does not mean that the households that owned small livestock in 2004 are the same ones that own small livestock in 2007.

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

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

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

Table 9.1: Household Characteristics

	2004	2007	Change			
			Estimate	SE	Signif.	95% Confidence Interval
Household Size						
1-2	13	12	-1.1	2.90		-6.6 5.0
3-4	24	26	1.3	3.51		-5.9 8.2
5-6	27	24	-2.8	2.87		-8.5 2.9
7+	36	39	2.7	4.00		-5.6 10.4
Mean Household Size	6.0	5.7	-0.3	0.25		0.21 -0.83
Female-headed Households	25	21	-4.2	4.01		-13.9 2.2

Source: Maswa DC CWIQ for 2004 and 2007

Table 9.2: Education

	2004	2007	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Literacy	65	60	-5.0	4.93		-14.8	4.9
Primary School							
Net Enrolment Rate	80	78	-1.9	3.76		-9.5	5.6
Satisfaction	34	48	14.3	6.90	**	0.4	28.0
Secondary School							
Net Enrolment Rate	10	8	-1.8	4.21		-10.2	6.6
Satisfaction	27	28	0.8	15.75		-31.3	33.0
Dissatisfaction Rate	67	54	-12.6	7.09	*	-26.4	2.0
Reasons for dissatisfaction							
Books/Supplies	52	61	9.6	9.32		-9.1	28.2
Poor Teaching	3	15	12.2	3.02	***	6.0	18.1
Lack of Teachers	48	54	5.7	8.55		-11.4	22.8
Bad Condition of Facilities	27	44	17.1	7.29	**	2.6	31.7
Overcrowding	14	17	3.7	5.91		-8.2	15.4

Source: Maswa DC CWIQ for 2004 and 2007

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

9.1 Household characteristics

The percent distribution of households by number of members presents no significant changes between the two surveys. This means that the observed differences are due to sampling errors, not to actual differences. The mean household size has also remained constant, as well as the share of female-headed households.

9.2 Education

Neither literacy nor net enrolment rates for primary or secondary school changed between the surveys. It must be pointed out that the net enrolment rate for secondary school still lags far behind that for primary school. The rate of satisfaction with primary school increased, but the rate of satisfaction with secondary school remained statistically unaltered.

Despite the overall share of dissatisfied students did not change between 2004 and 2007, some changes are appreciated in the reasons for dissatisfaction. The shares of students reporting dissatisfaction due to poor teaching and bad condition of the facilities increased drastically between the surveys.

9.3 Health

The rate of need increased between 2004 and 2007, while the rates of use satisfaction remained constant. The only reason for dissatisfaction that reports a significant change is shortage of trained professionals, which decreased by between 2 and 23 percentage points.

Neither the share of people who did not consult a healthcare provider nor the reasons for not consulting changed significantly. The main reason for not consulting is ‘no need’ in both cases.

The distribution of consultations by type of health facility has varied widely. The share of patients who used a public hospital decreased significantly, while the shares consulting private hospitals, traditional healers, and pharmacies increased in 2007.
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There have not been changes in the distribution of women giving birth. The share of women receiving pre-natal care did not change either. The share of women giving birth in hospitals or maternity guards has decreased at the 95 percent of confidence, by 26 to 50 percentage points. The distribution of births by person who assisted the delivery shows that the shares of births attended by health professionals and TBA (traditional birth assistants) decreased, while the share of child deliveries without assistance increased

Table 9.3: Health

	2004	2007	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Medical Services							
Need	12	21	9.2	1.78	***	5.7	12.8
Use	21	24	2.3	1.67		-1.0	5.7
Satisfaction	67	64	-2.1	5.83		-13.9	9.4
Reasons for Dissatisfaction							
Long wait	47	42	-5.0	11.59		-28.2	18.2
Shortage of trained professionals	28	16	-12.1	5.24	**	-22.6	-1.6
Cost	38	31	-7.1	7.56		-22.3	8.0
No drugs available	33	26	-6.9	7.66		-22.2	8.5
Unsuccessful treatment	24	19	-4.5	5.09		-14.7	5.7
Percentage not Consulting	79	77	-2.4	1.67		-5.7	1.0
Reasons for not consulting							
No need	97	97	-0.3	0.91		-1.9	1.7
Cost	1	1	0.0	0.56		-1.4	0.8
Distance	2	1	-0.3	0.57		-1.4	0.9
Facility Used							
Private hospital	3	10	7.1	2.14	***	2.8	11.4
Government hospital	59	42	-16.8	5.19	***	-27.2	-6.4
Traditional healer	7	13	6.4	2.36	***	1.6	11.1
Pharmacy	7	31	24.1	3.01	***	18.5	30.5
Women who Had Live-Births							
15-19	4	6	1.8	2.79		-3.7	7.4
20-24	20	19	-1.3	6.85		-15.0	12.4
25-29	27	36	9.5	7.26		-5.0	24.1
30-39	14	21	6.7	4.66		-2.8	15.8
40+	2	3	1.0	2.04		-3.1	5.1
Prenatal care	99	99	-0.6	0.02		-4.1	2.9
Facilities Used in Child Deliveries							
Hospital or maternity ward	88	50	-38.2	5.91	***	-50.0	-26.4
Delivery Assistance							
Doctor/Nurse/Midwife	68	51	-16.9	6.84	**	-30.6	-3.2
TBA	22	15	-7.3	5.54		-18.4	3.8
Other/Self	10	33	23.3	4.99	***	13.3	33.3
Child Nutrition							
Stunted (-2SD)	31	23	-8.1	4.07	**	-16.3	0.0
Severely Stunted (-3SD)	13	6	-7.7	2.59	***	-12.9	-2.6
Wasted (-2SD)	6	3	-2.3	1.39	*	-5.4	0.2
Severely Wasted (-3SD)	1	1	0.1	0.65		-1.2	1.4

Source: Maswa DC CWIQ for 2004 and 2007

drastically, between 13 and 33 percentage points.

The last panel of the table shows child nutrition indicators, previously defined in section 4. The rates of stunting and severe stunting show important decreases, while the rates of wasting and severe wasting show no significant changes.

9.4 Household Assets and Perceptions of Welfare

Table 9.4 analyses changes in household assets and on welfare perceptions. The share of households owning the same extension of land as the year preceding each of the surveys has increased, while the share reporting a reduction in

Table 9.4: Household Assets and Perception of Welfare

	2004	2007	Change				
			Estimate	SE	Signif.	95% Confidence Interval	
Landholding							
No holding	26	17	-8.8	6.13		-21.1	3.5
Less	11	3	-7.8	2.55	***	-13.0	-2.8
Same	83	93	10.7	3.49	***	3.7	17.7
More	7	4	-3.0	1.51	*	-6.0	0.0
Difficulty satisfying food needs							
Never	6	15	8.7	4.20	*	-0.1	16.7
Seldom	30	25	-4.9	4.47		-14.2	3.7
Sometimes	62	45	-17.1	5.64	***	-27.8	-5.3
Always	2	16	13.3	2.92	***	7.6	19.3
Livestock							
No livestock	67	47	-19.2	4.64	***	-28.3	-9.8
Small only	10	10	-0.2	1.82		-3.8	3.5
Large only	6	11	5.0	2.02	**	0.9	9.0
Small and large	18	32	14.2	3.92	***	6.4	22.1
Landholding (in acres)							
Mean	6.1	5.5	-0.6	1.07		-2.7	1.6
0	26	17	-8.8	6.13		-21.1	3.5
0-0.99	1	3	2.1	1.01	**	0.1	4.1
1-1.99	15	11	-4.0	2.84		-9.6	1.7
2-3.99	23	25	2.6	3.14		-3.7	8.9
4-5.99	10	16	6.1	2.73	**	0.6	11.5
6+	26	28	2.0	5.08		-8.2	12.2
Source of water							
piped water	14	4	-9.9	9.11		-28.3	8.2
protected well	43	47	4.0	9.08		-14.2	22.1
unprotected well	42	8	-34.5	8.18	***	-50.8	-18.1
Type of toilet							
None	6	40	34.2	4.03	***	26.2	42.3
Flush toilet	0	3	2.8	2.23		-1.7	7.3
Covered pit latrine	85	51	-34.1	5.00	***	-44.2	-24.2
Uncovered pit latrine	9	6	-2.8	2.89		-8.6	2.9
Economic Situation Has Deteriorated							
Community	75	33	-42.3	4.57	***	-50.7	-32.5
Household	69	48	-20.9	5.09	***	-30.4	-10.0

Source: Maswa DC CWIQ for 2004 and 2007

landowning decreased. The distribution of households by landholding shows that the share of households owning less than one hectare of land (but with some land) increased between 2004 and 2007, as well as the share of households owning between 4 and 6 hectares.

The percentage distribution household by livestock ownership shows interesting changes. The share owning no livestock decreased, while the shares of households owning only large and small and large livestock increased significantly.

The share of households reporting sometimes difficulties satisfying food needs decreased, but the share reporting always having these difficulties increased.

The share of households getting water from pipes or protected wells does not show significant changes, while the share of households getting water from unprotected wells has decreased. The

share of households with no toilet has increased, while the share of households reporting covered pit latrines has decreased markedly.

Finally, the share of people reporting deterioration in the economic situation of the community and of the household decreased in 2007 in comparison to the 2004 survey.