Kenya
Eastern Province
Moyale District



Monitoring the situation of children and women

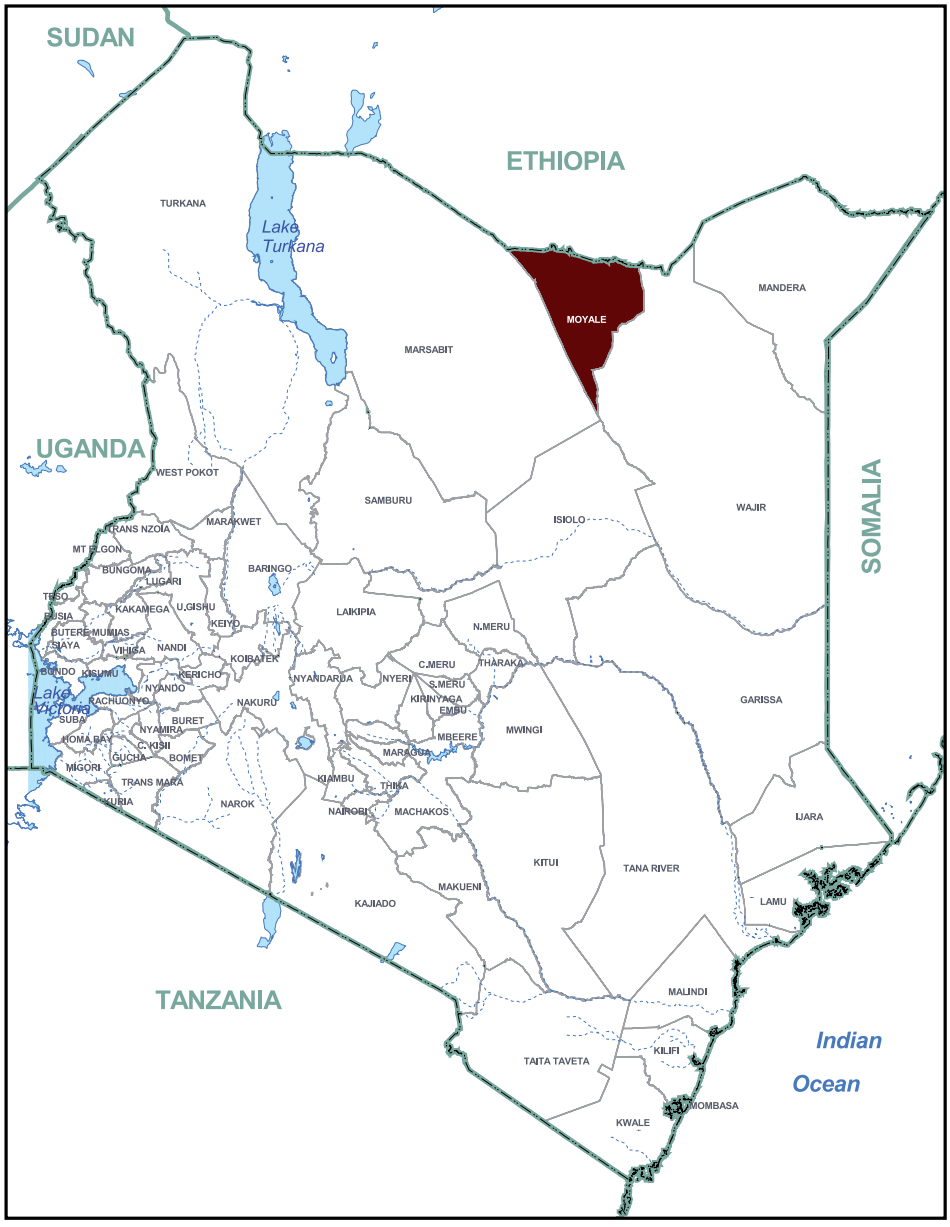
Multiple Indicator Cluster Survey 2008

Kenya National
Bureau of Statistics

United Nations
Children's Fund

MICS

Kenya
Eastern Province
Moyale District



Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2008

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The Moyale District Multiple Indicator Cluster Survey (MICS), Eastern Province of Kenya was carried by Kenya National Bureau of Statistics (KNBS). Financial and technical support was provided by the United Nations Children's Fund (UNICEF).

The survey has been conducted as part of the third round of MICS surveys (MICS3), carried out around the world in more than 50 countries, in 2005-2006, following the first two rounds of MICS surveys that were conducted in 1995 and the year 2000. Survey tools are based on the models and standards developed by the global MICS project, designed to collect information on the situation of children and women in countries around the world. Additional information on the global MICS project may be obtained from www.childinfo.org.

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Table of Contents

LIST OF TABLES ..... **V**

LIST OF FIGURES ..... **VII**

LIST OF ABBREVIATIONS ..... **VIII**

FOREWORD ..... **IX**

EXECUTIVE SUMMARY ..... **X**

SUMMARY OF FINDINGS ..... **XIII**

INTRODUCTION **1**

1.1 Background 1

1.2 Survey Objectives 2

SAMPLE AND SURVEY METHODOLOGY **3**

2.1 Sample Design 3

2.2 Questionnaires 3

2.3 Training And Fieldwork 4

2.4 Data Processing 4

SAMPLE COVERAGE AND HOUSEHOLDS CHARACTERISTICS **5**

3.1 Sample Coverage 5

3.2 Characteristics Of Households 6

3.3 Characteristics Of Female Respondents 8

3.4 Characteristics Of Children Under Five 9

CHILD MORTALITY **11**

4.1 Levels Of Childhood Mortality 11

NUTRITION **12**

5.1 Nutritional Status 12

5.2 Breastfeeding 15

5.3 Salt Iodization 19

5.4 Vitamin A Supplements 20

5.5 Birth Weight 22

5.6 Food Relief 26

CHILD HEALTH **25**

6.1 Immunization 25

6.2 Tetanus Toxoid 29

6.3 Oral Rehydration Treatment 30

6.4 Care Seeking And Antibiotic Treatment Of Pneumonia 32

6.5 Solid Fuel Use 37

6.6 Malaria 37

ENVIRONMENT **43**

7.1 Water 43

7.2 Sanitation 49

REPRODUCTIVE HEALTH **53**

8.1 Fertility 53

8.2 Teenage Pregnancy And Motherhood 54

8.3 Contraception 55

8.4 Unmet Need 57

8.5 Antenatal Care 58

8.6 Assistance At Delivery 60

CHILD DEVELOPMENT 62
9.1 Child Learning 62
EDUCATION 64
10.1 Pre-School Attendance And School Readiness 64
10.2 Primary And Secondary School Participation 62
10.3 Adult Literacy 69
CHILD PROTECTION 71
11.1 Birth Registration 71
11.2 Child Labour 72
11.3 Child Discipline 75
11.4 Early Marriage 76
11.5 Female Genital Mutilation/Cutting 78
11.6 Domestic Violence 81
HIV/AIDS, ORPHANED AND VULNERABLE CHILDREN 83
12.1 Knowledge Of Hiv/Aids Transmission And Condom Use 83
12.2 Orphans And Vulnerable Children 90
LIST OF REFERENCES 95
APPENDIX A: SAMPLE DESIGN 96
APPENDIX B: LIST OF PERSONNEL INVOLVED IN THE SURVEY 99
APPENDIX C: ESTIMATES OF SAMPLING ERRORS 100
APPENDIX D: DATA QUALITY TABLES 101
APPENDIX E: MICS INDICATORS - NUMERATORS AND DENOMINATORS 102
APPENDIX F: QUESTIONNAIRES 109

List of Tables

Table 3.1: Results of household and individual interviews 5
Table 3.2: Household Age Distribution by Sex 6
Table 3.3: Household Composition 7
Table 3.4 (HH.4): Women's background characteristics 8
Table 3.5 (HH.5): Children's background characteristics 10
Table 4.1: Child mortality 11
Table 5.1: Child nutritional status 14
Table 5.2 (NU.2): Initial breastfeeding 16
Table 5.3a (NU.3): Exclusive breastfeeding 17
Table 5.3b (NU.3): Complementary feeding 18
Table 5.4: Adequately fed infants 19
Table 5.5: Iodized salt consumption 20
Table 5.6: Children's vitamin A supplementation 21
Table 5.7: Post-partum mothers' vitamin A supplementation 22
Table 5.8: Low birth weight infants 23
Table 5.9: Food relief 24
Table 6.1: Vaccinations among children 26
Table 6.2: Vaccinations by background characteristics 28
Table 6.3: Neonatal tetanus protection 29
Table 6.4: Oral rehydration treatment 31
Table 6.5: Home management of diarrhea 32
Table 6.6: Care seeking for suspected pneumonia 34
Table 6.7: Antibiotic treatment of pneumonia 35
Table 6.8: Knowledge of the two danger signs of pneumonia 36
Table 6.9 (CH.8): Solid fuel use 37
Table 6.10: Availability of insecticide treated nets 38
Table 6.11: Children sleeping under bed nets 39
Table 6.12: Treatment of children with anti-malarial drugs 41
Table 6.13: Intermittent preventive treatment for malaria 42
Table 7.1: Use of improved water sources 45
Table 7.2: Household water treatment 47
Table 7.3: Time to source of water 48
Table 7.4: Person collecting water 49
Table 7.5: Use of sanitary means of excreta disposal 50
Table 7.6: Disposal of child's faeces 51
Table 7.7: Use of improved water sources and improved sanitation 52
Table 8.1: Current fertility 53
Table 8.2: Children ever born and living 54
Table 8.3: Teenage pregnancy and motherhood 55
Table 8.4: Use of contraception 56
Table 8.5: Unmet need for contraception 58
Table 8.6: Antenatal care provider 59

Table 8.7: Antenatal care content 60
Table 8.8: Assistance during delivery 61
Table 9.1: Family support for learning 63
Table 10.1: Early childhood education 64
Table 10.2: Primary school entry 65
Table 10.3: Primary school net attendance ratio 66
Table 10.4 (ED.4): Secondary school net attendance ratio 67
Table 10.5: Secondary school age children attending primary school 68
Table 10.6: Education gender parity 69
Table 10.7: Adult literacy 70
Table 11.1: Birth registration 72
Table 11.2: Child labour 73
Table 11.3: Labourer students and student labourers 74
Table 11.4: Child discipline 75
Table 11.5: Early marriage 77
Table 11.6: Spousal age difference 78
Table 11.7: Female genital mutilation/cutting (FGM/C) 79
Table 11.8: Attitude towards Female genital mutilation/cutting (FGM/C) 80
Table 11.9: Female genital mutilation/cutting (FGM/C) among daughters 81
Table 11.10: Attitudes toward domestic violence 82
Table 12.1: Knowledge of preventing HIV/AIDS transmission 84
Table 12.2: (HA.2): Identifying misconceptions about HIV/AIDS 85
Table 12.3: Comprehensive knowledge of HIV/AIDS transmission 86
Table 12.4: Knowledge of mother-to-child HIV/AIDS transmission 87
Table 12.5: Attitudes toward people living with HIV/AIDS 88
Table 12.6: Knowledge of a facility for HIV/AIDS testing 89
Table 12.7: HIV/AIDS testing and counselling coverage during antenatal care 90
Table 12.8: Children's living arrangements and orphan hood 91
Table 12.9: Prevalence of orphan hood and vulnerability among children 92
Table 12.10: School attendance of orphaned and vulnerable children 93
Table 12.11: Support for children orphaned and vulnerable due to HIV/AIDS 94

List of Figures

Figure 3.1: Age and sex distribution of household population 7
Figure 5.1: Percentage of children age 6-59 months who are undernourished 15
Figure 5.2: Infant feeding patterns by age 18
Figure 5.3: Percentage of infants weighing less than 2,500 grams at birth 23
Figure 6.1: Percentage of children aged 12-23 months who received recommended vaccinations by 12 months 26
Figure 6.2: Percentage of households with at least one treated mosquito net 39
Figure 7.1: Percentage distributions of household members by source of drinking water 43
Figure 12.1: Percentage of women who have comprehensive knowledge of HIV/AIDS transmission 89

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillus Calmette Guerin (Tuberculosis)
CDC	Centre for Disease Control
CSPro	Census and Survey Processing System
DPT	Diphtheria Pertussis Tetanus
DSO	District Statistical Officer
EPI	Expanded Programme on Immunization
ERS	Economic Recovery Strategy
FGM/C	Female genital mutilation/cutting
GPI	Gender Parity Index
GOK	Government of Kenya
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ITN	Insecticide Treated Net
IUD	Intrauterine Device
KEPI	Kenya Expanded Programme on Immunization
KNBS	Kenya National Bureau of Statistics
KESSP	Kenya Education Sector Support Programme
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NAR	Net Attendance Rate
NCHS	U.S. National Centre for Health Statistics
NPA	National Programme of Action
ORS	Oral Rehydration Salts
ORT	Oral rehydration treatment
Ppm	Parts Per Million
PRS	Poverty Reduction Strategy
RHF	Recommended Home Fluid
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization
WSC	World Summit for Children

Foreword

The Moyale District Multiple Indicator Cluster Survey (MICS) 2008 is one of the largest district representative sample surveys conducted in the district. The survey covered 1,117 households selected using appropriate statistical procedures.

The objective of the district level MICS is to provide estimates relating to the well being of children and women at the district level, to enable policymakers, planners, researchers and program managers to take actions based on credible evidence pointed out by the survey. In MICS 2008, information on specific areas such as, reproductive health, child mortality, child health, nutrition, child protection, water and sanitation, education, and HIV/AIDS and orphans were collected.

The results indicate that the infant and child mortality rates in Moyale district are high. The prevalence of under-weight children is also high. The proportion of children who are exclusively breastfed is also low.

I wish to acknowledge the efforts of various organizations and individuals who contributed immensely towards the success of this survey. First, I would like to acknowledge the technical and financial assistance from the United Nations Children's Fund (UNICEF). The staff of UNICEF Kenya country office provided valuable professional support and guidance to the project which is highly appreciated. The hard work and commitment of the staff of the Kenya National Bureau of Statistics (KNBS) in executing the tasks of this survey are highly acknowledged. Their dedication enabled us to successfully complete the survey and avail the results. Additional appreciation goes to the good work done by the interviewers and supervisors who braved difficult terrain and field conditions to collect data for this survey. I also appreciate the meticulous care and attention to detail with which data processing was carried out by staff tasked to accomplish these important tasks. I wish to thank the staff of UNICEF and KNBS for their valuable effort in editing this final report.

Finally, I am grateful to the respondents who generously gave their time to provide the information and for allowing the survey teams to measure the weights and heights of children below 5 years of age. The information they provided and data generated by the survey form the basis of this report.



Anthony K. M. Kilele, MBS
Director General
Kenya National Bureau of Statistics

Executive Summary

The Moyale District Multiple Indicator Cluster Survey (MICS) is a district representative sample survey drawn using the 1999 Census of Kenya Enumeration Areas (EAs) as the sampling frame. The 50 EAs were sampled using the probability proportional to size (PPS) sampling methodology, and information from a total of 1,117 households were collected using structured questionnaires. The Moyale MICS is the largest household sample survey ever conducted in the district.

The survey used a two-stage design and at the EA level households were stratified into two, i.e., households with a child below three years of age at the time of household listing , and those with no children below three years. The stratification at the household level was done to increase the numbers in the sample of children and of women who have given birth in the recent years to reduce the standard errors of child and women based estimates. The data was collected by two teams comprising of five members each, one supervisor, one editor/measurer and three interviewers.

The survey was implemented by the Kenya National Bureau of Statistics (KNBS), with the support from UNICEF Kenya. The summary of findings from the survey is presented below.

Child Mortality

The under-five mortality rate and the infant mortality rate were calculated using the birth history data for the 10 year period preceding the survey. The under-five mortality rate is 49 per 1,000 live births and infant mortality rate is 41 per 1,000 live births.

Nutritional Status and Breastfeeding

The nutritional status of children less than five years old was measured to gauge the prevalence of underweight, stunting and wasting levels. The prevalence of underweight was about 22 per cent, stunting was 29 per cent and wasting 10 per cent.

Timely breastfeeding was defined as the new-born baby being breast-fed within an hour of birth. Results on timely breastfeeding indicate that 82 per cent of the children were breastfed in time. Exclusive breastfeeding stands at 26 per cent for children aged 0-5 months.

Eighty-five per cent of the households were using iodized salt for cooking. A relatively high proportion (9 per cent) of households had no salt.

About 71 per cent of households were registered for food relief, and 85 per cent of households had received food relief in the last one month.

Immunization

Only 51 per cent of children aged 12-23 months received full vaccination (BCG, 3 doses of Polio, 3 doses of DPT+HepB+Hib and measles) before reaching age 12 months.

BCG was reportedly given to 90 per cent of children aged 12-23 months but the measles vaccine was received by only 76 per cent of the children, indicating a low coverage rate of measles compared with BCG coverage.

About 55 per cent of the mothers who have given birth during in the two years preceding the survey have received tetanus toxoid (TT) injection.

Care of illness

Only one in every three children with diarrhoea during the two weeks preceding the survey (34 per cent) received oral re-hydration therapy, and one in every ten cases of diarrhoea among children (11 per cent) were reportedly managed at home.

For almost 78 per cent of the children who had suspected pneumonia, treatment was sought from an appropriate health service

provider, with three in every five (61 per cent) children being given antibiotic treatment.

Malaria prevention

In Moyale, 58 per cent of the households (almost three in every five) have at least one insecticide treated mosquito net, and 71 per cent of children below five years of age sleep under a net. However, only 60 per cent of the children sleep under an insecticide treated net.

Fifty six per cent of children below five years with fever during the two weeks preceding the survey were given an anti-malarial treatment.

Only 43 per cent of women who had given birth during the two years preceding the survey reported intermittent preventive malaria treatment.

Water and sanitation

About 46 per cent of the Moyale population is using drinking water from an improved source, and a quarter of the sample reported treating drinking water.

Around 28 per cent of the population is using improved sanitation facilities. In 55 per cent of the cases, child stool is disposed safely.

About 39 per cent households have no facilities and use the bush and/or field for excreta disposal.

Reproductive health

The total fertility rate in Moyale for the three years preceding the survey is 6.4 children per woman.

The adolescent age group, i.e., 15-19 years, contributed 15 per cent to the district's total fertility, which peaks at age 25-29 years.

Among mothers who gave birth in the past two years, 71 per cent had an antenatal check-up, but only 36 per cent of births in the same period were delivered by skilled personnel. Only about 26 per cent of the deliveries in the district took place at a health facility.

Among women aged between 15-19 years, 30 per cent are married or in union. Sixteen per cent of the women aged 15-49 in marriage or union got married before the age of 15 years, while 57 per cent of the women aged 20-49 got married before the age of 18 years.

Education

In Moyale, only 23 per cent of the children aged between 36-59 months are attending early childhood education. Readiness of school attendance was rated at about 90 per cent.

The net primary school attendance rate is 74 per cent while that of secondary school at 12 per cent.

Female adult literacy rate in Moyale is rated at 28 per cent.

Child protection

Registration of births in Moyale covers 34 per cent of children under five years of age.

A modest three per cent of the children aged between 5-14 years in Moyale are engaged in child labour. However, 53 per cent of child labourers also attend school.

About 76 per cent of children aged between 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members during one month prior to the survey.

The prevalence of early marriage of children aged less than 15 is 16 per cent, while the figure is 57 per cent for those less than 18 years. Among women aged 15 -19 years of age, 30 per cent were married at the time of the survey.

HIV and AIDS

Only 29 per cent of young women aged between 15-49 years in Moyale have comprehensive knowledge about HIV prevention. About 86 per cent of women aged between 15-49 years have knowledge about mother-to-child transmission of HIV.

Overall, HIV testing coverage for prevention of mother to child transmission was 61 per cent with 44 per cent of women aged between 15-49 years having been tested.

Sixty per cent of women who delivered a child in the last two years received counselling on prevention of mother-to-child transmission of HIV, and about the same percentage had an HIV test.

Orphans and vulnerable children

Ten per cent of the children under 18 years in Moyale are orphans, and about nine per cent are not living with any biological parent. Four per cent of children are considered as being vulnerable.

Female genital mutilation/cutting (FGM/C) and domestic violence

Knowledge about FGM/C among women aged 15-49 years in Moyale is universal with100 per cent of them having heard of the practice, and nearly all of them (98 per cent) have undergone some form of FGM/C.

About 59 per cent of the Moyale women aged between 15-49 years who have heard about FGM/C approve of the practice.

Eighty per cent of the women believe that a husband can beat their wife if she goes out without seeking his permission, neglects the children, argues with him, refuses to have sex with him, or does not cook properly.

Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, MOYALE, Eastern Province, Kenya, 2008

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	& Unit
CHILD MORTALITY					
Child mortality	1	13	Under-five mortality rate	49	per thousand
	2	14	Infant mortality rate	41	per thousand
NUTRITION					
Nutritional status			Underweight prevalence (below -2 SD)	22.4	per cent
			Stunting prevalence (below -2 SD)	29.3	per cent
			Wasting prevalence (below -2 SD)	9.8	per cent
Breastfeeding	45		Timely initiation of breastfeeding	82.3	per cent
	15		Exclusive breastfeeding rate	25.7	per cent
	16		Continued breastfeeding rate		
			at 12-15 months	83.6	per cent
			at 20-23 months	45.9	per cent
	17		Timely complementary feeding rate	18.1	per cent
	18		Frequency of complementary feeding	11.2	per cent
	19		Adequately fed infants	19.3	per cent
Salt iodization	41		Iodized salt consumption	84.6	per cent
Vitamin A	42		Vitamin A supplementation (under-fives)	14.8	per cent
	43		Vitamin A supplementation (post-partum mothers)	49.9	per cent
Low birth weight	9		Low birth weight infants	11.0	per cent
	10		Infants weighed at birth	42.6	per cent
CHILD HEALTH					
Immunization	25		Tuberculosis immunization coverage (by 12 months)	90.4	per cent
	26		Polio immunization coverage (by 12 months)	67.5	per cent
	27		DPT immunization coverage (by 12 months)	70.9	per cent
	28	15	Measles immunization coverage (by 12 months)	75.5	per cent
	31		Fully immunized children (by 12 months)	51.4	per cent
Tetanus toxoid	32		Neonatal tetanus protection	55.1	per cent
Care of illness	33		Use of oral rehydration therapy (ORT)	80.3	per cent
	34		Home management of diarrhoea	0.0	per cent
	35		Received ORT or increased fluids, and continued feeding	1.2	per cent
	23		Care seeking for suspected pneumonia	78.0	per cent
	22		Antibiotic treatment of suspected pneumonia	60.6	per cent
Solid fuel use	24	29	Solid fuels	98.9	per cent
Malaria	36		Households having insecticide-treated nets (ITNs)	43.8	per cent
	37	22	Under-fives sleeping under insecticide-treated nets	38.7	per cent
	38		Under-fives sleeping under mosquito nets	39.3	per cent
	39	22	Antimalarial treatment (under-fives)	56.6	per cent
	40		Intermittent preventive malaria treatment (pregnant women)	22.1	per cent
ENVIRONMENT					
Water and Sanitation	11	30	Use of improved drinking water sources	46.3	per cent
	13		Water treatment	25.4	per cent
	12	31	Use of improved sanitation facilities	28.3	per cent
	14		Disposal of child's faeces	55.4	per cent
REPRODUCTIVE HEALTH					
Contraception and unmet need	21	19c	Contraceptive prevalence	6.6	per cent
	98		Unmet need for family planning	4.4	per cent
Maternal and newborn health	20		Antenatal care	70.6	per cent
	44		Content of antenatal care		
			Blood test taken	64.9	per cent
			Blood pressure measured	63.5	per cent
			Urine specimen taken	63.3	per cent
			Weight measured	66.6	per cent
	4	17	Skilled attendant at delivery	36.2	per cent
	5		Institutional deliveries	25.6	per cent
			Total fertility rate	6.4	Rate

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value & Unit	
EDUCATION					
Education	52		Pre-school attendance	22.9	per cent
	53		School readiness	79.9	per cent
	54		Net intake rate in primary education	33.9	per cent
	55	6	Net primary school attendance rate	73.8	per cent
	56		Net secondary school attendance rate	11.6	per cent
			Adult literacy rate (female)	28.3	Per cent
CHILD PROTECTION					
Birth registration	62		Birth registration	34.1	per cent
Child labour	71		Child labour	3.4	per cent
	72		Labourer students	53.0	per cent
	73		Student labourers	2.3	per cent
Child discipline	74		Any psychological/physical punishment	75.6	per cent
Early marriage and polygamy	67		Marriage before age 15	15.6	per cent
			Marriage before age 18	56.5	per cent
	68		Young women aged 15-19 currently married/in union	30.1	per cent
Female genital mutilation/ Cutting	66		Approval for FGM/C	58.8	per cent
	63		Prevalence of female genital mutilation/cutting (FGM/C)	97.5	per cent
	64		Prevalence of extreme form of FGM/C	7.8	per cent
	65		FGM/C prevalence among daughters	37.6	per cent
Domestic violence	100		Attitudes towards domestic violence	80.5	per cent
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN					
HIV/AIDS knowledge and attitudes	82	19b	Comprehensive knowledge about HIV prevention among young people	29.4	per cent
	89		Knowledge of mother- to-child transmission of HIV	46.6	per cent
	86		Attitude towards people with HIV/AIDS	32.6	per cent
	87		Women who know where to be tested for HIV	61.2	per cent
	88		Women who have been tested for HIV	44.4	per cent
	90		Counselling coverage for the prevention of mother-to-child transmission of HIV	60.3	per cent
	91		Testing coverage for the prevention of mother-to-child transmission of HIV	59.6	per cent
Support to orphaned and vulnerable children	75		Prevalence of orphans	9.6	per cent
	78		Children's living arrangements	9.0	per cent
	76		Prevalence of vulnerable children	4.2	per cent
	77	20	School attendance of orphans versus non-orphans	0.76	ratio
	81		External support to children orphaned and made vulnerable by HIV/AIDS	18.9	per cent

Introduction 1

1.1 Background

This report is based on the Moyale District Multiple Indicator Cluster Survey, conducted in 2008 by the Kenya National Bureau of Statistics. The survey provides valuable information on the situation of children and women in Moyale, and was based in large part on the need to monitor progress towards goals and targets emanating from recent international agreements, including the Millennium Declaration adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. All the above commitments build upon promises made by the international community at the 1990 World Summit for Children.

In signing these international agreements, governments committed to improving conditions for their children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see box below).

A Commitment to Action:
National and International Reporting Responsibilities

The governments that signed the Millennium Declaration and the World Fit for Children Declaration and Plan of Action also committed themselves to monitoring progress towards the goals and objectives they contained:

"We will monitor regularly at the national level and, where appropriate, at the regional level and assess progress towards the goals and targets of the present Plan of Action at the national, regional and global levels. Accordingly, we will strengthen our national statistical capacity to collect, analyse and disaggregate data, including by sex, age and other relevant factors that may lead to disparities, and support a wide range of child-focused research. We will enhance international cooperation to support statistical capacity-building efforts and build community capacity for monitoring, assessment and planning." (**A World Fit for Children**, paragraph 60)

"…We will conduct periodic reviews at the national and sub-national levels of progress in order to address obstacles more effectively and accelerate actions.…" (**A World Fit for Children**, paragraph 61)

The Plan of Action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports:

"… As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the Declaration and the Plan of Action."

Similarly, the **Millennium Declaration** (paragraph 31) calls for periodic reporting on progress:

"…We request the General Assembly to review on a regular basis the progress made in implementing the provisions of this Declaration, and ask the Secretary-General to issue periodic reports for consideration by the General Assembly and as a basis for further action."

Kenya is committed to improving the welfare of its people, particularly the women and children who tend to be more vulnerable to social-economic hardships. With regard to children, the Government of Kenya (GOK) formulated the National Programme of Action (NPA) for children in 1992 soon after the World Summit for Children (WSC) which was held in 1990. The main objective of this programme was to identify issues affecting children and the strategies to address them. Vital components of NPA include measuring indicators of progress towards declared goals through proper monitoring and evaluation of projects/programmes and other interventions e.g. emergency response and humanitarian assistance. The call for consolidated efforts over these initiatives was further stressed in the Vision 2030 document.

Proper monitoring and evaluation of targeted projects and programmes by the government and development partners requires a wide range of data to track progress towards the achievement of desired outcomes. In this respect, the MICS data from the district will be helpful in appraising such national programmes as Poverty Reduction Strategy (PRS), Economic Recovery Strategy (ERS), and The Kenya Education Sector Support Programme (KESSP) 2005-2010, among other programmes.

The GOK /UNICEF programme has a sizeable component of production of high quality and sufficiently disaggregated data for effective child friendly policy formulation and programme implementation.

The results from MICS 2008 in Moyale district of Eastern Province are presented in this report.

1.2 Survey Objectives

The 2008 Moyale District Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Moyale District of Eastern Province;

- To furnish data needed for monitoring progress toward goals established in the Millennium Declaration, the goals of A World Fit For Children (WFFC), other internationally agreed upon goals, and of Vision 2030, as a basis for future action;

- To contribute to the improvement of data and monitoring systems in Kenya, and to strengthen technical expertise in the design, implementation and analysis of such systems.

Sample and Survey Methodology 2

2.1 Sample Design

The sample for the Moyale District Multiple Indicator Cluster Survey (MICS) was designed to provide estimates on a large number of indicators on the situation of children and women at the district level, and the sample was selected in two stages. Within each district, 50 clusters (census enumeration areas) were selected with probability proportional to population size. After a household listing was carried out within the selected enumeration areas (EAs), all households were stratified into two groups, the first having children below three years of age, and the second not having child below three years. From each selected cluster (EA), a systematic sample of 16 households from stratum one and eight households from stratum two was drawn using a random start. The sample was stratified and is not self-weighting. For reporting the results, sample weights are used. A more detailed description of the sample design can be found in Appendix A.

2.2 Questionnaires

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all *de jure* household members, the household, and the dwelling; 2) a women's questionnaire administered in each household to all women aged between 15-49 years; and 3) an under-five questionnaire administered to mothers or caretakers of all children under five living in the household. The questionnaires included the following modules:

The Household Questionnaire included the following modules:

- Household Listing
- Education
- Water and Sanitation
- Malaria-related questions
- Child Labour
- Child Discipline
- Salt Iodization

The Questionnaire for Individual Women was administered to all women aged between 15-49 years living in the households, and included the following modules:

- Child Mortality
- Tetanus Toxoid
- Maternal and Newborn Health
- Marriage and Union
- Contraception
- Attitudes Towards Domestic Violence
- Female Genital Mutilation/Cutting
- HIV/AIDS knowledge

The Questionnaire for Children under Five was administered to mothers of children below five years of age[1] living in the households. Where the mother was not listed in the household roster, a primary caretaker for the child was identified and interviewed. The questionnaire included the following modules:

[1] The terms "children under 5", "children age 0-4 years", and "children aged 0-59 months" are used interchangeably in this report.

- Birth Registration and Early Learning
- Child Development
- Vitamin A
- Breastfeeding
- Care of Illness
- Malaria
- Immunization
- Anthropometry

The questionnaires are based on the MICS 3 model questionnaire.[2] From the MICS 3 model English version, the questionnaires were translated into Kiswahili, Borana, Kamba, Meru, and Embu languages.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content, and measured the weights and heights of children aged 0-59 months. Details and findings of these measurements are provided in the respective sections of the report.

2.3 Training and Fieldwork

Training for the fieldwork was conducted in two parts, three days training for the mapping and listing teams and 12 days training for the main survey teams in June 2008. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Towards the end of the training period, trainees spent one full day in practice interviewing in different locations of Embu district before conducting interviews in the sampled households.

The household listing was carried out by three teams, each comprising a lister and a mapper. These three teams were supervised by the District Statistical Officer (DSO) and the whole listing operation was being monitored by the district co-ordinator located at KNBS headquarters.

The data were collected by two teams, each comprising of three interviewers, one driver, one editor/measurer and a supervisor. Fieldwork began at the end of June 2008 and concluded at the end of August 2008.

2.4 Data Processing

Data was entered using the CSPro software. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. The whole process was monitored by two supervisors. Procedures and standard programs developed under the global MICS 3 project and adapted to the modified questionnaire were used throughout. Data entry process began simultaneously with data collection in July 2008 and was completed in September 2008. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, and the model syntax and tabulation plans developed by UNICEF were customized for this purpose.

[2] The model MICS3 questionnaire can be found at www.childinfo.org, or in UNICEF, 2006.

3.1 Sample Coverage

All the selected enumeration areas were successfully canvassed. Table 3.1 (HH.1) presents a summary of results of interviews of households, individual women aged between 15-49 years and children aged less than five years. Out of the 1,200 households selected for the sample, 1,182 households were found to be occupied. Among these, 1,117 were successfully interviewed, which translates into a household response rate of 94.5 per cent.

In the interviewed households, the total number of eligible women was 1,171, out of whom 1,031 were interviewed. These figures translated into an 88 per cent response rate. In addition, 1,136 children under age five were listed in the household questionnaire. Questionnaires were completed for 1,119 of these children, which corresponds to a response rate of 98.5 per cent. Overall response rates of 83.2 and 93.1 per cent were achieved for the women and under-five interviews respectively.

Table 3.1 (HH.1): Results of household and individual interviews

Number of households, women, and children below 5 years by results of the interviews, and household, women's and children below 5 years response rates, Moyale district, Eastern Province, Kenya 2008

Number of households	
Sampled (H_s)	1,200.0
Occupied (H_o)	1,182.0
Interviewed (H_i)	1,117.0
Response rate (H_r)	94.5
Number of women	
Eligible (W_e)	1,171.0
Interviewed (W_i)	1,031.0
Response rate (W_r)	88.0
Overall response rate (W_{or})	83.2
Number of children under 5	
Eligible (C_e)	1,136.0
Information collected (C_i)	1,119.0
Response rate (C_r)	98.5
Overall response rate (C_{or})	93.1

$H_r = H_i / H_o$ (where H_o is HH8 = 1, 2, 3 or 6)
$W_r = W_i / W_e$; $W_{or} = W_r$ X H_r ;
$C_r = C_i / C_e$; $C_{or} = C_r$ X H_r
Note: This table is un-weighted, however all other tables presented in this report are weighted unless mentioned otherwise.

3.2 Characteristics of Households

The survey successfully interviewed 1,117 households, consisting of 6,278 household members of whom 3,265 were males and 3,013 females. This gives Moyale district an estimated average household size of 5.6 with a sex ratio of 108.

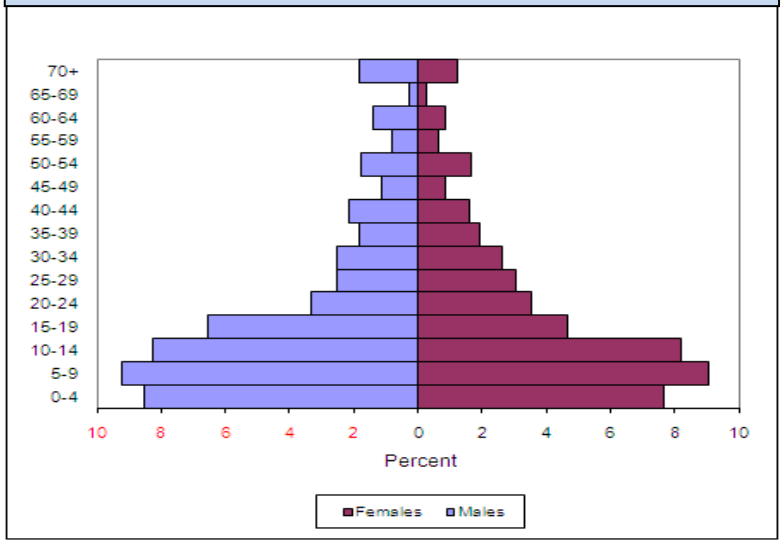
The age and sex distribution of the survey population is provided in Table 3.2 (HH.2) and the population pyramid in Figure 3.1 (HH.1). The age distribution from Table 3.2 (HH.2) shows that the five-year age distribution for both sexes has a higher proportion of persons in the lower age groups (0-19 years) at 62.1 per cent than for those in the higher age groups (20 and above), which is indicative of a youthful population. The population aged 60 years and above is only 5.9 per cent. The dependent population (0-14 years and 65+) translates into an age dependency ratio of 54.6 per cent.

Table 3.2 (HH.2): Household age distribution by sex

Percentage distribution of the household population by five-year age groups and dependency age groups, and number of children aged 0-17 years, by sex, Moyale district, Eastern Province, Kenya 2008

	Males		Females		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Age						
0-4	534	16.3	482	16.0	1,016	16.2
5-9	579	17.7	569	18.9	1,148	18.3
10-14	518	15.9	514	17.1	1,032	16.4
15-19	411	12.6	294	9.8	705	11.2
20-24	209	6.4	223	7.4	432	6.9
25-29	157	4.8	191	6.3	347	5.5
30-34	159	4.9	165	5.5	324	5.2
35-39	113	3.4	121	4.0	233	3.7
40-44	133	4.1	100	3.3	232	3.7
45-49	72	2.2	55	1.8	128	2.0
50-54	112	3.4	105	3.5	216	3.4
55-59	51	1.6	39	1.3	91	1.4
60-64	87	2.7	55	1.8	141	2.2
65-69	17	(*)	16	(*)	33	(0.5)
70+	114	3.5	79	2.6	193	3.1
Missing/DK	2	(*)	5	(*)	7	(*)
Dependency age groups						
< 15	1,630	49.9	1,565	51.9	3,195	50.9
15-64	1,502	46.0	1,347	44.7	2,849	45.4
65 +	131	4.0	96	3.2	227	3.6
Missing/DK	2	(*)	5	(*)	7	(*)
Children aged 0-17	1,912	58.6	1,727	57.3	3,639	58.0
Adults 18+/Missing/ DK	1,353	41.4	1,286	42.7	2,639	42.0
Total	**3,265**	**100.0**	**3,013**	**100.0**	**6,278**	**100.0**

Figure 3.1: Age and sex distribution of household population, Moyale district, 2008



The sex of the household head, household size and composition are important factors that impact on household welfare. Table 3.3 (HH.3) provides basic background information on the households, including their sizes and the percentage distribution of household headship by sex. The weighted and un-weighted numbers of total households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households where at least one child was under 18, at least one child was under five, and at least one woman was aged between 15-49 years. Almost 90 per cent of households reported at least one child aged below 18 years with 59 per cent of the sampled households having at least one child below five years of age.

The mean household size in Moyale district is 5.6 persons. Female-headed households are about 23.9 per cent. Majority of households have between 4-5 household members (28.8 per cent of households), followed by 6-7 household members (24.5 per cent).

Table 3.3 (HH.3): Household composition

Percentage distribution of households by selected characteristics, Moyale district, Eastern Province, Kenya 2008

Characteristics	Weighted percentage	Number of households	
		Weighted	Un-weighted
Sex of household head			
Male	76.1	850	865
Female	23.9	267	252
Number of household members			
1	3.9	43	32
2-3	19.1	214	203
4-5	28.8	321	331
6-7	24.5	274	279
8-9	15.3	171	177
10+	8.4	94	95
Mean household size	5.6	NA	NA
At least one child aged < 18 years	89.6	1,117	1,117
At least one child aged < 5 years	59.3	1,117	1,117
At least one woman aged 15-49 years	81.0	1,117	1,117

3.3 Characteristics of Female Respondents

Information on the background characteristics of the female respondents aged between 15-49 years, and their distribution by various socio-economic characteristics is presented in Tables 3.4 (HH.4)[3]. In addition to providing useful information on the background characteristics of women and children, the tables also show the numbers of observations by each background category. These categories are used in the subsequent tabulations of this report.

Table 3.4 (HH.4): Women's background characteristics

Percentage distribution of women aged between 15-49 years by background characteristics, Moyale district, Eastern Province, Kenya 2008

Characteristics	Weighted percentage	Number of women	
		Weighted	Un-weighted
Age			
15-19	19.7	204	199
20-24	19.8	204	208
25-29	18.5	191	199
30-34	15.3	158	166
35-39	10.8	111	109
40-44	10.0	103	96
45-49	5.9	60	54
Marital/Union status			
Currently married/in union	74.7	770	788
Formerly married/in union	6.0	62	62
Never married/in union	19.2	198	181
Motherhood status			
Ever gave birth	76.9	793	820
Never gave birth	23.1	238	211
Education			
None	72.5	747	753
Primary	21.4	220	219
Secondary +	6.2	64	59
Wealth index			
Low	53.3	550	564
Medium	18.0	185	187
High	28.7	296	280
Total	**100.0**	**1,031**	**1,031**

[3] Principal components analysis was performed by using information on the ownership of household goods and amenities (assets) to assign weights to each household asset, and obtain wealth scores for each household in the sample (The assets used in these calculations were as follows: number of sleeping rooms, type of floor, type of roof, type of walls, type of fuel used for cooking, electricity, radio, television, telephone (mobile or land line), refrigerator, computer, internet connection, watch, bicycle, motorcycle or scooter, animal drawn cart, car or truck, boat with motor, source of drinking water and type of sanitation). Each household was then weighted by the number of household members, and the household population was divided into three groups, based on the wealth scores of households they were living in. The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels, and the wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Rutstein and Johnson, 2004, and Filmer and Pritchett, 2001.

The age distribution shows that about 40 per cent of females are in the 15-24 age-group. While the proportion in each group tends to decrease with increasing age, the largest proportions are in the 15-19 and 20-24 age groups.

Overall, 75 per cent of the female respondents are currently married or in union, and 77 per cent of females have given birth at least once.

Close to three in every four females in Moyale district have no education while about one-fifth of women have primary level education. Only six per cent of women have secondary education or above.

While more than half the women (53 per cent) are in the low wealth household status, over one-third (29 per cent) are in the high wealth category.

3.4 Characteristics of Children below Five years

Details on the distribution of children below five years by sex, age in months, mothers' or caretakers' education, and wealth index of households are presented in Table 3.5 (HH.5).
The first year of life (0-11 months) has been split into two (the under six month olds, and 6-11 months). Among children aged less than 5 years, the proportion of children aged less than six months is 13 per cent while that for the 6-11 months is seven per cent.
Four in five mothers of children less than 5 years (81 per cent) have no education while one in seven (16 per cent) have primary level education. Only four per cent of mothers of children under the age of five years have attained secondary or higher education.

The distribution of children below five years by wealth index shows that 55 per cent of the children belong to low wealth index households, 28 per cent belong to high wealth index households and the rest of the children belong to medium wealth index households.

Table 3.5 (HH.5): Children's background characteristics

Percentage distribution of children under five years of age by background characteristics, Moyale district, Eastern Province, Kenya 2008

Characteristics	Weighted percentage	Number of under-5 children	
		Weighted	Un-weighted
Sex			
Male	52.5	587	596
Female	47.5	532	523
Age			
< 6 months	13.1	147	145
6-11 months	7.2	81	84
12-23 months	19.7	221	222
24-35 months	21.3	239	245
36-47 months	19.6	220	220
48-59 months	19.0	212	203
Mother's education			
None	81.0	906	904
Primary	15.5	173	176
Secondary +	(3.6)	40	39
Wealth index			
Low	55.0	615	624
Medium	17.3	193	196
High	27.8	311	299
Total	**100.0**	**1119**	**1119**

NOTE: An asterisk (*) indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed. Figure in parenthesis (e.g. (10.5)) are based on the 25-49 un-weighted cases.

Child Mortality 4

One of the overarching goals of the Millennium Development Goals (MDGs) and the World Fit for Children (WFFC) is to reduce infant and under-five mortality. Specifically, the MDG four calls for the reduction in under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is an important but difficult objective. Measuring childhood mortality may seem easy, but attempts using direct questions, such as "Has anyone in this household died in the last year?" give inaccurate results. However, Kenya's district level MICS used direct measures of child mortality from birth histories which is one of the best ways of obtaining this information. The birth histories obtained from women age 15-49 years include number of children ever born and living by sex, and date of birth of each child born. If the child is not alive at the time of survey, information on age of the child at the time of death is also obtained. This method is used by Demographic and Health Surveys (DHS) worldwide including that of Kenya Demographic and Health Survey (KDHS), which allows us to compare the MICS mortality rates with those of KDHS.

The infant mortality rate is the probability of dying before the first birthday. The under-five mortality rate is the probability of dying before the fifth birthday. The neonatal mortality rate is the probability of dying before one month of life. Post neonatal mortality rate is the probability of dying between one month and one year of life. The child mortality rate refers to probability of dying between one and five years of life. All mortality rates mentioned above are expressed per 1,000 live births, except for the child mortality rate, which is expressed per 1,000 children surviving up to 12 months of age.

Though, direct estimates of mortality obtained from birth histories are among the best, the quality of these mortality estimates depend on the completeness of information obtained in the birth histories. In many cases, women tend to avoid reporting their dead children, which underestimates the mortality levels.

4.1 Levels of Childhood Mortality

Table 4.1 provides estimates of childhood mortality for the ten year period preceding the survey. The infant mortality rate in Moyale district is estimated at 41 per 1,000 live births, while the probability of dying before the fifth birthday- under-5 mortality rate (U5MR) is around 49 per 1,000 live births.

Table 4.1: Child mortality

Infant, neonatal, post-neonatal, child and under-five mortality rates for 10-year period preceding the survey, Moyale district, Eastern Province, Kenya 2008

10-year period preceding the survey	Infant mortality rate	Neonatal mortality rate	Post-neonatal mortality rate	Child mortality rate	Under-five mortality rate
0-9	41	24	17	8	49

Nutrition 5

Children's nutritional status is a reflection of their overall health. When children have access to an adequate food supply, and are not exposed to repeated illness, while being well cared for, they reach their growth potential and are considered well nourished.

Malnutrition is associated with more than half of all children deaths worldwide. Undernourished children are more likely to die from common childhood ailments. For the undernourished children, those who survive are more likely to experience recurring sicknesses and faltering growth. Three-quarters of children who die from causes related to malnutrition tend to be only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Millennium Development target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A World Fit for Children goal is to reduce the prevalence of malnutrition among children under five years of age by at least one-third by 2010, with special attention to children under two years of age. A reduction in the prevalence of malnutrition will assist in the goal to reduce child mortality.

5.1 Nutritional Status

In a well-nourished population, there is a reference distribution of height and weight for children under age five. Under-nourishment in a population can be gauged by comparing children to that reference population. The one used in this report is the WHO/CDC/NCHS reference, which is recommended for use by UNICEF and the World Health Organization. Each of the three nutritional status indicators can be expressed in standard deviation units (z-scores) from the median of the reference population.

Weight-for-age is a measure of both acute and chronic malnutrition. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered moderately or severely underweight while those whose weight-for-age is more than three standard deviations below the median are classified as severely underweight.

Height-for-age is a measure of linear growth. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as moderately or severely stunted. Those whose height-for-age is more than three standard deviations below the median are classified as severely stunted. Stunting is a reflection of chronic malnutrition resulting from failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, children whose weight-for-height is more than two standard deviations below the median of the reference population are classified as moderately or severely wasted, while those who fall more than three standard deviations below the median are severely wasted. Wasting is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

In Moyale District MICS, weights and heights of all children aged 6-59 months were measured using anthropometric equipment recommended by UNICEF (UNICEF, 2006). The findings reported in this section are based on the results of these measurements.

Table 5.1 (NU.1) shows percentages of children classified into each of these categories, based on the anthropometric measurements that were taken during fieldwork. Children who were not weighed and measured (approximately 1.5 per cent of children) and those whose measurements were outside a plausible range are excluded. A total of 3.1 per cent children are excluded from the analysis due to either the inability to measure the child's weight, of because their age information

was missing, or they were flagged as 'outliers'. Additionally, the table includes the percentage of children who are *overweight*, which takes into account those children whose weight-for-height is *above* two standard deviations from the median of the reference population.
The prevalence of underweight in children below five years in Moyale district is 22 per cent, while four per cent are classified as severely underweight (Table 5.1 (NU.1)). Children who are moderately stunted are about 29 per cent, while severe stunting is 10 per cent. Children who are moderately and severely wasted are about 10 per cent and two per cent. Male children are more likely to be under-weight and stunted than female children. There was no clear trend in the extent of underweight, stunting and wasting across the age groups. For underweight and stunting, however, there is an indication that the proportion of children under-weight and stunted increases after the first year of life, probably suggesting a lack of access to complementary foods.

Children with mothers who are more educated are less likely to be under-weight or stunted. For example, 25 per cent of children with mothers who have no education were under-weight compared to only 6 per cent for those with mothers having secondary or higher levels of education. Similarly the proportion of children who are under-weight or stunted decreases with increasing levels of the household wealth index. For example, 35 per cent of children from low wealth index households are moderately stunted versus only 24 per cent among those from high wealth index households. A a similar pattern is observed between household wealth index and proportions of children who are under-weight.

Table 5.1 (NU.1): Child malnourishment

Percentage of children aged between 6-59 months who are severely or moderately malnourished, Moyale district, Eastern Province, Kenya 2008

	Weight-for-age		Height-for-age		Weight-for-height			Number of children aged 6-59 months
Characteristics	% below - 2 SD	% below - 3 SD	% below - 2 SD	% below - 3 SD	% below - 2 SD	% below - 3 SD	% above + 2 SD	
Sex								
Male	25.2	4.3	32.0	12.0	9.4	1.6	1.9	419
Female	19.5	3.7	26.4	8.2	10.1	1.8	3.0	394
Age								
6-11 months	11.2	-	13.2	4.0	10.7	3.9	10.8	75
12-23 months	25.3	6.5	36.8	11.9	13.7	2.3	2.4	184
24-35 months	21.2	5.4	29.5	12.8	5.3	0.9	0.7	201
36-47 months	23.6	3.8	27.8	6.8	8.1	1.5	2.2	181
48-59 months	26.0	1.7	31.3	12.1	11.6	0.9	1.3	161
Mother's education								
None	24.8	4.7	31.9	11.9	10.3	2.0	1.8	645
Primary	15.1	1.5	22.7	4.2	7.7	-	4.4	137
Secondary +	5.5		2.9	-	7.8	3.9	7.5	30
Wealth index								
Low	30.5	6.5	35.2	14.1	12.1	2.3	2.4	440
Medium	15.5	2.1	19.9	7.4	5.9	1.2	0.5	143
High	11.3	0.4	23.7	4.4	7.8	0.8	3.8	230
Total	**22.4**	**4.0**	**29.3**	**10.2**	**9.8**	**1.7**	**2.4**	**813**

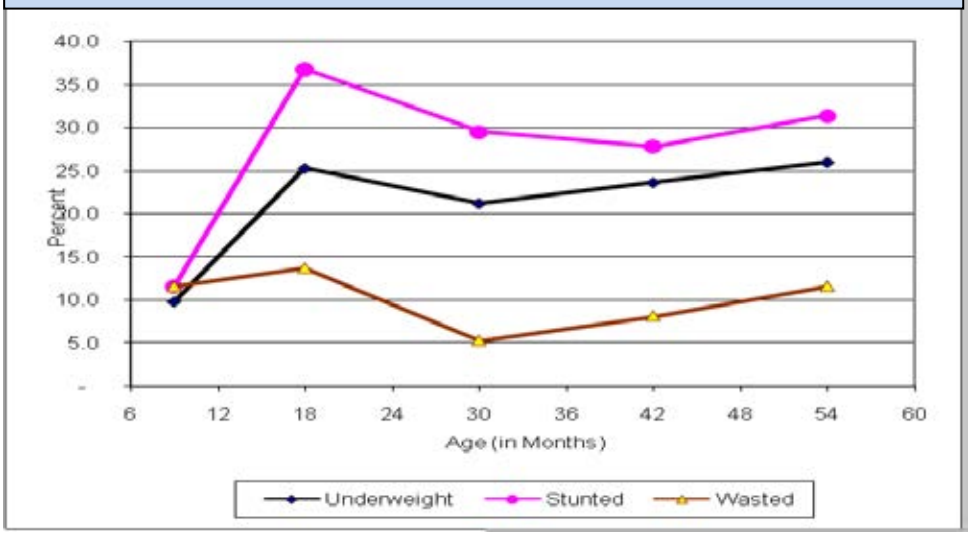
Columns 1 and 2 refer to children whose weight for age z-scores (i.e., the exact number of standard deviations from the median) fall below -2 standard deviations (moderately underweight) and -3 standard deviations (severely underweight) from the median weight for age of the NCHS reference population. Columns 3 and 4 refer to children whose height for age z-scores fall below -2 standard deviations (moderately stunted or short for their age) and -3 standard deviations (severely stunted or short for their age) from the median height for age of the reference population. Stunted children are considered as chronically undernourished. Columns 5 and 6 refer to children whose weight for height z-scores fall -2 standard deviations (moderately wasted) or -3 standard deviations (severely wasted) from the weight for height of the reference population. Wasting is usually the result of a recent nutritional deficiency. The table also includes the percentage of children who are overweight, which takes into account those children whose weight for height is above 2 standard deviations from the median of the reference population.

The per cent 'below –2 standard deviations' includes those who fall -3 standard deviations below the median.

Children whose height or weights are missing are excluded from the calculations. If height and weight data are missing for more than 10 per cent of under-five children, caution should be exercised in the interpretation of the results. In addition, children for whom the indices are out of range are omitted.

Figure 5.1 provides results of undernourished children in Moyale district. The graph clearly shows a hike in the proportion of children who are under-weight and stunted after the first year of life.

Figure 5.1: Percentage of children age 6-59 months who are undernourished, Moyale district, 2008



5.2 Breastfeeding

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition, and is unsafe if clean water is not readily available. A World Fit for Children goal states that children should be exclusively breastfed for six months and should continue to be breastfed with safe, appropriate and adequate complementary feeding even beyond two years of age.

WHO/UNICEF have the following feeding recommendations:

- Exclusive breastfeeding for the first six months
- Continued breastfeeding for two years or more
- Safe, appropriate and adequate complementary foods beginning at six months
- Frequency of complementary feeding: two times per day for 6-8 month olds; three times per day for 9-11 month olds

It is also recommended that breastfeeding be initiated within one hour of birth.

The indicators of recommended child feeding practices are as follows:

- Exclusive breastfeeding rate (< 6 months & < 4 months)
- Timely complementary feeding rate (6-9 months)
- Continued breastfeeding rate (12-15 & 20-23 months)
- Timely initiation of breastfeeding (within 1 hour of birth)
- Frequency of complementary feeding (6-11 months)
- Adequately fed infants (0-11 months)

Table 5.2 (NU.2) provides information on the proportion of women who started breastfeeding their infants within one hour of birth, and within one day of birth (which includes those who started within one hour).

The data indicate that nearly 90 per cent women in Moyale district breastfeed their children within one day of birth and a little over 82 per cent of women start breastfeeding within one hour of birth.

Table 5.2 (NU.2): Initial breastfeeding

Percentage of women aged 15-49 years with a birth in the two years preceding the survey who breastfed their baby within one hour of birth and within one day of birth, Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage who started breastfeeding within one hour of birth	Percentage who started breastfeeding within one day of birth	Number of women with a live birth in the two years preceding the survey
Months since birth			
< 6 months	83.8	89.5	113
6-11 months	80.7	89.9	91
12-23 months	81.6	89.2	180
More than 23	(84.6)	(94.1)	39
Mother's education			
None	83.0	90.5	336
Primary	79.4	87.6	75
Secondary +	(*)	(*)	12
Wealth index			
Low	79.2	87.4	237
Medium	88.3	95.7	75
High	84.9	91.3	111
Total	**82.3**	**89.9**	**423**

NOTE: An asterisk (*) indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed. Figure in parenthesis (e.g. (10.5)) are based on the 25-49 un-weighted cases.

Women with no education are more likely to breastfeed their children within one hour of birth (83 per cent) and one day of birth (91 per cent). Initiation of breastfeeding across the wealth index shows that a higher proportion of women from medium wealth index households initiate breastfeeding within one hour of birth or within one day of birth followed by those from higher and low wealth index households.

Table 5.3a and 5.3b (NU.3) provide results of the breastfeeding status based on the reports of mothers/ caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. Exclusively breastfed refers to infants who received only breast milk (and vitamins, mineral supplements, or medicine). The table 5.3(NU.3) provides results for exclusive breastfeeding of infants during the first six months of life by categories of ages 0-3 months and 0-5 months. Complementary feeding of children between 6-9 months and continued breastfeeding of children at 12-15 and 20-23 months of age is provided in the same table.

The table shows that 26 per cent of children aged less than six months are exclusively breastfed, a rate which is considerably lower than expected given that exclusive breastfeeding is recommended for the first 6 months after birth. Male children were more likely to be exclusively breastfed than the females for both the 0-3 month's group and the 0-5 month's group.

Table 5.3a (NU.3): Initial Breastfeeding

Percentage of living children according to breastfeeding status at each age group, Moyale district, Eastern Province, Kenya 2008

Characteristics	Children age 0-3 months		Children age 0-5 months	
	Percentage exclusively breastfed	Number of children	Percentage exclusively breastfed	Number of children
Sex				
Male	(38.2)	48	27.1	80
Female	(31.6)	31	(23.3)	47
Mother's education				
None	34.0	59	25.1	98
Primary	(*)	16	(*)	23
Secondary +	(*)	4	(*)	6
Wealth index				
Low	(40.6)	32	28.0	55
Medium	(*)	16	(21.3)	27
High	(30.3)	30	(25.5)	45
Total	**35.6**	**79**	**25.7**	**127**

Note: Breastfeeding status is based on mother's or caretaker's reports of children's consumption in the 24 hours prior to the interview. Exclusive breastfeeding refers to children who receive only breast milk, or breast milk and vitamins, mineral supplements, or medicine.
(*): Based on less than 25 un-weighted cases
( ): Based on 25-49 un-weighted cases

Table 5.3b (NU.3) presents data on breastfeeding and complementary feeding of children between 6-9 months, 12-15 months and 20-23 months. As with table 5.3a, the low frequencies in some categories limited the analysis by selected characteristics. About 18 per cent of children aged 6-9 months received breastfeeding and complementary feeding.

Table 5.3b (NU.3): Complementary feeding

Percentage of living children according to breastfeeding status at each age group, Moyale district, Eastern Province, Kenya 2008

	Children age 6-9 months		Children age 12-15 months		Children age 20-23 months	
Characteristics	Percentage receiving breast milk and solid/ mushy food	Number of children	Percentage breastfed	Number of children	Percentage breastfed	Number of children
Sex						
Male	(13.1)	37	84.5	48	66.8	27
Female	(23.7)	34	(82.7)	47	23.7	25
Mother's education						
None	15.4	57	82.2	82	38.7	41
Primary	(*)	9	(*)	12	69.5	10
Secondary +	(*)	5	(*)	1	100.0	1
Wealth index						
Low	(16.5)	35	86.4	66	53.1	31
Medium	(*)	14	(*)	13	51.3	7
High	(*)	22	(*)	16	25.0	13
Total	**18.1**	**71**	**83.6**	**95**	**45.9**	**51**

(*) Based on less than 25 un-weighted figures
( ) Based on 25-49 un-weighted figures.

Figure 5.2 shows the detailed pattern of breastfeeding by the child's age in months. Even at the earliest ages, the majority of children are receiving liquids or foods other than breast milk. By the end of the fifth month, the percentage of children exclusively breastfed is below five per cent.

Figure 5.2: Infant feeding patterns by age: Percentage distribution of children aged less than 3 years by feeding pattern by age group,

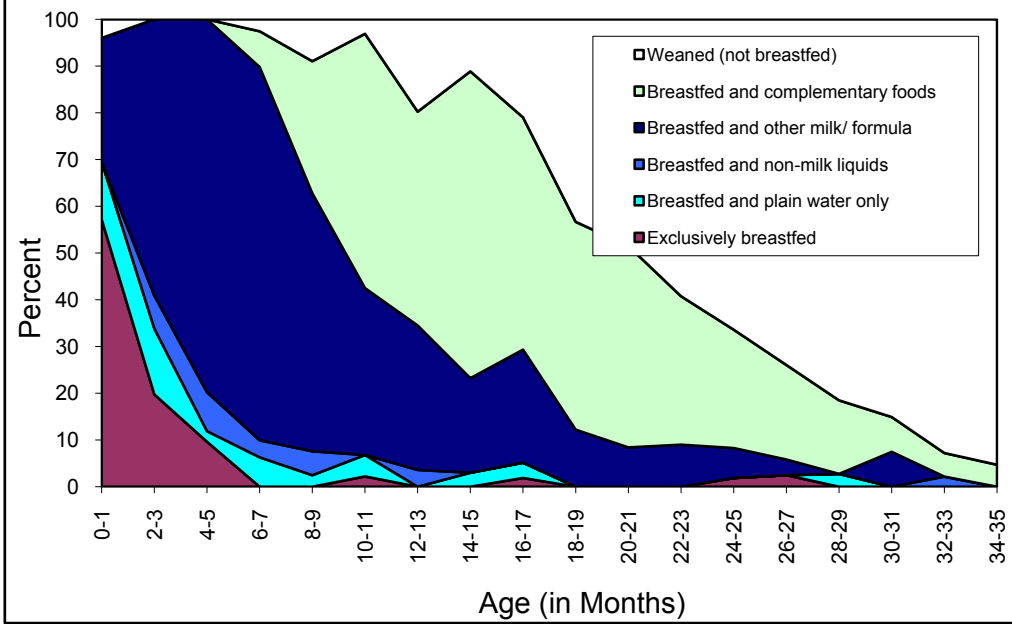


Table 5.4 (NU.4) provides details of the adequacy of infant feeding in children under 12 months. Different definitions of adequate feeding are used depending on the age of the child. For infants aged between 0-5 months, exclusive breastfeeding is considered as adequate feeding. Infants aged between 6-8 months are considered to be adequately fed if they are receiving breast milk and complementary food at least two times per day, while infants aged between 9-11 months are considered to be adequately fed if they are receiving breast milk and eating complementary food at least three times a day.

Among children aged 0-5 months, 26 per cent are considered adequately fed compared to only nine and 13 per cent for those aged 6-8 and 9-11 months, respectively. Generally, male children are fed adequately than their female counterparts, except for those who received breast milk and complementary food at least two times in the previous 24 hours among 6-8 months old. Overall, only 19 per cent of children aged between 0-11 months are appropriately fed based on the age-specific feeding recommendations. With regard to background characteristics, the effect of mothers' education was not clear due to lower frequencies. While the effect of household wealth status was also limited by low frequencies in medium category, there is some evidence that infant feeding improves with wealth status.

Table 5.4 (NU.4): Adequately fed infants

Percentage of infants under 6 months of age exclusively breastfed, percentage of infants 6-11 months who are breastfed and who ate solid/semi-solid food at least the minimum recommended number of times yesterday and percentage of infants adequately fed, Moyale district, Eastern Province, Kenya 2008

	Percentage of infants					
Characteristics	0-5 months exclusively breastfed	6-8 months who received breast milk and complementary food at least 2 times in prior 24 hours	9-11 months who received breast milk and complementary food at least 3 times in prior 24 hours	6-11 months who received breast milk and complementary food at least the minimum recommended number of times per day	0-11 months who were appropriately fed	Number of infants aged 0-11 months
Sex						
Male	27.1	7.2	15.5	11.5	20.7	136
Female	23.3	11.4	10.0	10.8	17.3	92
Mother's education						
None	25.1	1.9	11.8	7.0	17.0	178
Primary	(29.7)	(25.9)	(12.9)	(20.7)	(26.5)	36
Secondary +	(*)	(*)	(*)	(*)	(*)	13
Wealth index						
Low	28.0	2.9	5.2	4.0	16.6	106
Medium	(21.3)	-	(16.3)	(6.9)	(15.7)	45
High	25.5	25.2	24.5	24.8	25.2	77
Total	**25.7**	**9.3**	**13.3**	**11.2**	**19.3**	**228**

(*): Based on less than 25 un-weighted cases
( ): Based on figures 25-49 un-weighted cases.

5.3 Salt Iodization

Iodine Deficiency Disorders (IDD) is one of the world's leading causes of preventable mental retardation and impaired psychomotor development in young children. In its most extreme form, iodine deficiency causes cretinism. It also increases the risks of stillbirth and miscarriage in pregnant women. Iodine deficiency is most commonly and visibly associated with goitre. IDD takes

its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability, and impaired work performance. The indicator is the percentage of households consuming adequately iodized salt (>15 parts per million).

As shown in Table 5.5 (NU.5A), salt used for cooking was tested in 90 per cent of households interviewed in the sample. The salt was tested for iodine content by using salt test kits and testing for the presence of potassium iodide and potassium iodate.
Nine per cent of the households did not have salt, and the proportion without salt declined with increasing levels of the household wealth index. Salt was found to be adequately iodized i.e. contain 15 parts per million (ppm) or more of iodine in 85 per cent of the households where salt was tested. The share of households using adequately iodised salt increased with the household wealth index.

Table 5.5 (NU.5A): Iodized salt consumption

Percentage of households consuming adequately iodized salt, Moyale district, Eastern Province, Kenya 2008

Wealth index	Percentage of households in which salt was tested	Number of households interviewed	Percentage of households with Salt test result: No salt	< 15 PPM	15+ PPM*	Total	Number of households in which salt was tested or with no salt
Low	84.6	643	13.6	5.4	81.0	100.0	630
Medium	95.8	180	2.5	12.6	84.9	100.0	177
High	96.9	294	1.7	5.9	92.5	100.0	290
Total	**89.7**	**1,117**	**8.7**	**6.7**	**84.6**	**100.0**	**1,097**

5.4 Vitamin A Supplementation

Vitamin A is essential for eye health and proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely. In developing countries where vitamin A is largely consumed in the form of fruits and vegetables, daily per capita intake is often insufficient to meet dietary requirements. Inadequate intakes are further compromised by increased requirements for the vitamin as children grow, or during periods of illness, as well as increased losses during common childhood infections. As a result, vitamin A deficiency is quite prevalent in the developing world, particularly in countries with the highest burden of under-five deaths.

The 1990 World Summit for Children set the goal of virtual elimination of vitamin A deficiency and its consequences, including blindness, by the year 2000. This goal was also endorsed at the Policy Conference on Ending Hidden Hunger in 1991, the 1992 International Conference on Nutrition, and the UN General Assembly's Special Session on Children in 2002. The critical role of vitamin A for child health and immune function also makes control of deficiency a primary component of child survival efforts, and therefore critical to the achievement of the fourth Millennium Development Goal: a two-thirds reduction in under-five mortality by the year 2015.

For countries with vitamin A deficiency problems, current international recommendations call for high-dose vitamin A supplementation every four to six months, targeted to all children between the ages of 6- 59 months living in affected areas. Providing young children with two high-dose vitamin A capsules a year is a safe, cost-effective, efficient strategy for eliminating vitamin A deficiency and improving child survival. Supplementing vitamin A to lactating mothers helps protect their children during the first months of life and helps to replenish the stores of vitamin A, depleted during pregnancy and lactation. For countries with vitamin A supplementation programs,

the definition of the indicator is the percentage of children aged 6-59 months receiving at least one high dose vitamin A supplement in the six months.

Based on UNICEF/WHO guidelines, the Ministry of Health, Government of Kenya recommends that children aged between 6-11 months be given one high-dose vitamin A capsules and children aged between 12-59 months be given a vitamin A capsule every six months. In some parts of the country, vitamin A capsules are linked to immunization services and are given when the child has contact with these services after six months of age. It is also recommended that mothers take a vitamin A supplement within eight weeks of giving birth due to increased vitamin A requirements during pregnancy and lactation.

In Moyale, 15 per cent of children aged between 6-59 months received a high-dose vitamin A supplement within the six months prior to the survey (Table 5.6 (NU.6)). About 42 per cent received the supplement within the last six months prior to the survey. Twenty eight per cent of children never received a vitamin A supplement while 14 per cent of the children received one but mothers were not sure when.

Table 5.6 (NU.6): Children's vitamin A supplementation

Percentage distribution of children aged 6-59 months by whether they have received a high dose vitamin A supplement in the last 6 months, Moyale, Eastern Province, Kenya 2008

	Per cent of children who received vitamin A:							
Characteristics	Within last 6 months*	Prior to last 6 months	Not sure when	Not sure if received vitamin A	Never received vitamin A	Missing	Total	Number of children aged 6-59 months
Sex								
Male	14.3	40.7	13.4	1.2	29.9	0.5	100.0	507
Female	15.3	43.7	15.0	0.7	25.2	-	100.0	484
Age								
6-11 months	36.5	15.3	4.2	1.2	42.8	1.1	100.0	81
12-23 months	221	43.5	8.5	0.9	25.0	-	100.0	221
24-35 months	11.6	47.7	17.1	0.5	23.1	0.6	100.0	239
36-47 months	8.6	45.1	19.7	1.4	25.2	-	100.0	220
48-59 months	6.7	44.9	16.0	0.9	31.5	-	100.0	212
Mother's education								
None	14.2	41.3	14.3	0.9	29.4	0.3	100.0	808
Primary	16.5	49.6	11.0	1.4	21.5	-	100.0	150
Secondary +	(22.0)	(29.8)	(27.6)	-	(20.7)	-	(100.0)	34
Wealth index								
Low	14.7	37.4	14.9	1.2	31.9	0.4	100.0	560
Medium	12.6	50.7	14.5	-	22.2	-	100.0	166
High	16.4	46.8	12.7	1.1	23.0	-	100.0	266
Total	**14.8**	**42.1**	**14.2**	**1.0**	**27.9**	**0.2**	**100.0**	**992**

( ): Based on figures 25-49 un-weighted cases

Fifty per cent of mothers with a birth in the two years before the MICS received a vitamin A Supplement within eight weeks of the birth (Table 5.7 (NU.7)). The likelihood of receiving a vitamin A supplementation increases with the education attainment of the mother as well as by increasing levels of household wealth index.

Table 5.7 (NU.7): Post-partum mothers' vitamin A supplementation

Percentage of women aged 15-49 years with a live birth in the 2 years preceding the survey by whether they received a high dose vitamin A supplement before the infant was 8 weeks old, Moyale district, Eastern Province, Kenya 2008

Characteristics	Received vitamin A supplement*	Not sure if received vitamin A	Number of women aged 15-49 years
Education			
None	47.5	1.2	336
Primary	56.0	-	75
Secondary +	(78.1)	(0.0)	12
Wealth index			
Low	42.5	1.4	237
Medium	51.7	0.9	75
High	64.5	-	111
Total	**49.9**	**1.0**	**423**

The numerator includes all women who say they received a vitamin A dose in the first two months after their last birth (even if their last birth was less than two months prior to the interview). The denominator includes women who had a live birth in the two years preceding the date of interview.

( ): Based on figures 25-49 un-weighted cases

5.5 Low Birth Weight

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face higher risk of dying during their early months and years. Those who survive have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have cognitive disabilities, which affects their performance in school and their work capacities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

One of the major challenges in measuring the incidence of low birth weight is the fact that more than half of infants in the developing world are not weighed. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased because the majority of newborns are not delivered in facilities, and those who are represent only a small sample of all births. Because many infants are not weighed at birth, and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2,500 grams is estimated from two items in the questionnaire:

the mother's assessment of the child's size at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's weight, or the weight as recorded on a health card if the child was weighed at birth.[4]

Overall, about 43 per cent of the infants were weighed at birth with approximately 11 per cent estimated to weigh less than 2,500 grams (Table 5.8 (NU.8)). The proportion of low birth weight decreases with improving levels of mother's education. The proportion weight at birth also increases with increasing levels of household wealth index. However, the proportion of births below 2500 grams was highest among those from high wealth index households (12 per cent) and lowest among those from medium wealth index households (9 per cent).

Table 5.8 (NU.8): Low birth weight infants

Percentage of live births in the 2 years preceding the survey that weighed below 2500 grams at birth, Moyale district, Eastern Province, Kenya 2008

	Per cent of live births:		
Characteristics	Below 2500 grams	Weighed at birth	Number of live births
Mother's education			
None	11.4	37.3	384
Primary	8.3	65.7	85
Secondary +	(*)	(*)	12
Wealth index			
Low	10.8	27.5	277
Medium	8.8	48.8	86
High	12.0	75.1	118
Total	**10.8**	**42.6**	**481**

(*) Based on less than 0-25 figures

Figure 5.3: Percentage of infants weighing less than 2,500 grams at birth, Moyale district , 2008



[4] For a detailed description of the methodology, see Boerma, Weinstein, Rutstein and Sommerfelt, 1996.

5.6 Food Relief

Seventy one per cent of the households in the district have registered as beneficiaries of food distribution program. Among those registered, 85 per cent received food supplies during the last one month, while another 14 per cent received supplies between 1-3 months before the survey. Less than one per cent received supplies of food between 3-6 months and before 6 months, respectively. Twenty-two per cent of the households reported that the supply met all their food needs.

Table 5.9 (NU9): Food relief

Percentage of households registered as beneficiary of food distribution program, and of those registered time of last receipt of food and whether meeting their full requirement or not, Moyale District, Eastern Province, Kenya 2008

Wealth index	Per cent households registered as beneficiary of food distribution	Total number of households	Per cent of households by time last receipt of food distribution					Per cent of households reporting supply meeting all their food needs	Number of households registered as beneficiary of food distribution
			Within one month	Between 1-3 months	Between 3-6 months	After 6 months	Total per cent		
Low	67.6	643	82.8	16.3	0.5	0.5	100.0	18.1	434
Medium	86.6	180	91.4	8.6	0.0	0.0	100.0	30.7	156
High	67.6	294	84.2	143	0.6	0.9	100.0	24.8	199
Total	**70.6**	**1,117**	**84.8**	**14.3**	**0.5**	**0.5**	**100.0**	**21.9**	**789**

6.1 Immunization

The Millennium Development Goal (MDG) 4 is to reduce child mortality by two thirds between 1990 and 2015. Immunization plays a key part in this goal. Immunizations have saved the lives of millions of children in the three decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still 27 million children overlooked by routine immunization and as a result, vaccine-preventable diseases cause more than two million deaths every year.

A World Fit for Children goal is to ensure full immunization of children under one year of age at 90 per cent nationally, with at least 80 per cent coverage in every district or equivalent administrative unit. The Kenya Expanded Programme on Immunizations (KEPI) and the *Malezi Bora* campaigns are playing key roles in this regard.

In Kenya, and in accordance with the Ministry of Health guidelines, a child should receive a BCG vaccination to protect him/her against tuberculosis, three doses of DPT to protect against diphtheria, pertussis and tetanus and three doses of Polio vaccine by the age of 12 months. The measles vaccine should be administered by the age of nine months. This is in accordance with the UNICEF and WHO guidelines.

In MICS, mothers or care givers of children below five years of age were asked to provide vaccination cards and interviewers copied vaccination information from the cards onto the questionnaire. However, information about children with no immunization card was obtained using a set of structured direct questions on immunization. The immunization coverage shown in this report includes information from card as well as re-call, unless mentioned otherwise.

Overall, 60 per cent of children had health cards in Moyale (Table 6.2 (CH.2)). If the child did not have a card, the mother was asked to recall whether or not the child had received any of the vaccinations and, for DPT and Polio, how many times.

The percentage of children aged between 12 to 23 months who received each of the vaccinations is shown in Table 6.1 (CH.1). The denominator for the table comprises of children aged between 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the bottom panel, only those who were vaccinated before their first birthday, as recommended, are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Ninety per cent of children aged 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT (DPT1) was given to 87 per cent. The percentage receiving subsequent doses of DPT declines to 86 and 71 per cent for the second and third dose, respectively. A similar pattern is observed for polio where 88 per cent of children received Polio 1 by age 12 months, but this coverage decline to 80 and 68 per cent for polio 2 and polio 3 respectively. The coverage for measles vaccine by 12 months is lower than for the other vaccines at 76 per cent. Overall, only 51 per cent of children in Moyale are fully immunized before the age of 12 months, falling far short of the 90 per cent targeted goal.

Table 6.1 (CH.1): Vaccinations among children

Percentage of children aged 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, MICS Moyale district, Eastern Province, Kenya 2008

Vaccinated at any time before the survey	Percentage of children who received: BCG	DPT 1	DPT 2	DPT 3	Polio 0	Polio 1	Polio 2	Polio 3	Measles	All*	None	Number of children aged 12-23 months
According to:												
Vaccination card	59.7	59.6	59.9	56.8	39.4	59.4	59.9	57.3	49.9	48.5	-	219
Mother's report	30.7	29.3	26.3	16.1	18.8	29.5	20.8	11.7	28.9	8.6	8.5	219
Either	90.4	89.0	86.2	72.9	58.2	88.9	80.8	68.9	78.9	57.1	8.5	219
Vaccinated by 12 months of age	90.4	86.9	85.7	70.9	58.2	87.6	80.4	67.5	75.5	51.4	8.5	219

Total number of 12-23 month olds vaccinated with BCG, (OPV3, DPT3, Measles, HepB, or HiB) before 12 months, as validated by card or mother's recall. To estimate the number of children without a card to have received vaccine before 1st birthday the proportion of vaccinations given during the first year of life is assumed to be the same as for the proportion of children with a card that received the vaccine before 1st birthday.
*Children who received 'all' vaccinations are those who have received 3 doses of DPT, 3 doses of Polio (excluding Polio 0), BCG, and Measles.

Figure 6.2: Percentage of children aged 12-23 months who received recommended vaccinations by 12 months, MICS Moyale district, 2008

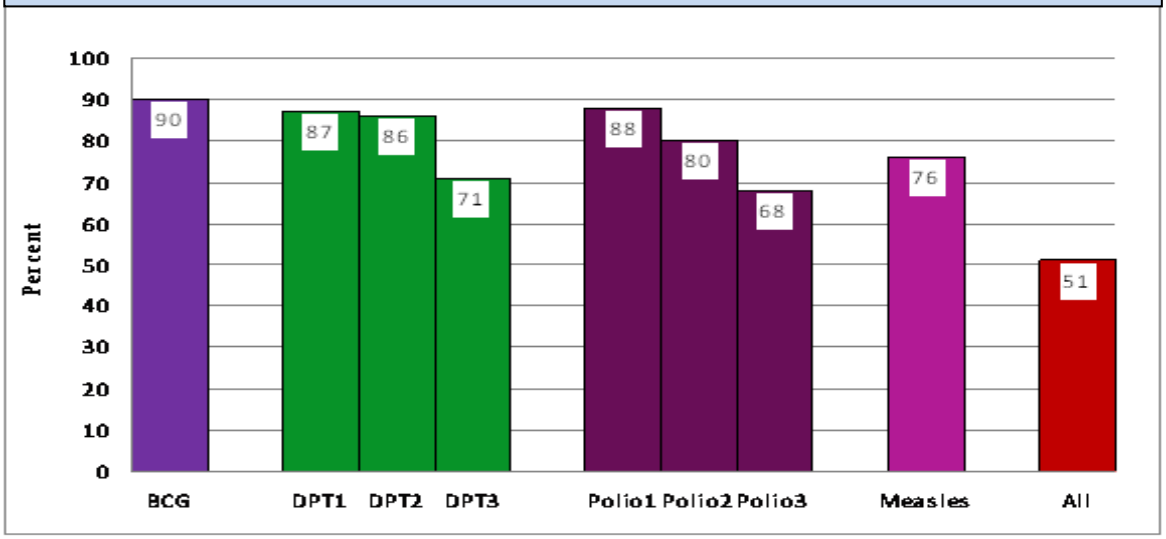


Table 6.2 (CH.2) shows vaccination coverage rates among children 12-23 months by background characteristics. The figures show children who received the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/caretakers' reports.

The coverage of BCG, DPT1 and Polio 1 among children aged 12-23 months is near universal in Moyale district, at 90, 89 and 89 per cent respectively. However, the coverage of subsequent doses of DPT (DPT 2 and DPT 3) and Polio (Polio 2 and Polio 3) drops significantly.

The measles vaccination was reportedly received by 79 per cent of children age 12-23 months. Overall, 57 per cent of children age 12-23 months are fully vaccinated, i.e., received BCG, 3 doses of DPT, 3 doses of Polio and measles vaccines. The rate was marginally higher among male than female children, at 59 per cent compared to 56 per cent for the latter category. However, nine per cent of the children aged between 12-23 months had not received any vaccination. The lower frequencies of observations for the educational and household wealth index categories limited the understanding of the effects of these factors on vaccination coverage among children aged 12-23 months.

Table 6.2 (CH.2): Vaccinations by background characteristics

Percentage of children aged 12-23 months currently vaccinated against childhood diseases, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of children who received											Per cent with health card	Number of children aged 12-23 months
	BCG	DPT1	DPT2	DPT3	Polio0	Polio1	Polio2	Polio3	Measles	All	None		
Sex													
Male	90.8	89.1	87.7	73.6	53.3	89.0	82.9	71.4	77.0	58.5	8.2	61.9	110
Female	90.0	88.8	84.6	72.1	63.2	88.7	78.6	66.5	80.7	55.6	8.8	58.5	109
Mother's education													
None	88.9	87.8	84.7	70.4	54.9	87.0	79.3	67.0	77.0	55.0	9.8	58.9	183
Primary	(98.2)	(94.8)	(93.0)	(87.8)	(78.9)	(98.2)	(87.7)	(77.3)	(87.8)	(68.9)	(1.8)	(70.7)	35
Secondary +	(*)	(*)	(*)	(*)		(*)	(*)	(*)	(*)	(*)			2
Wealth index													
Low	88.0	87.4	83.0	70.3	51.3	86.2	78.6	68.3	72.9	53.4	10.2	61.2	141
Medium	(89.6)	(89.6)	(89.6)	(76.6)	(73.5)	(89.6)	(81.2)	(76.6)	83.6)	(72.7)	(0.4)	(67.2)	31
High	(98.1)	(93.2)	(93.2)	(77.9)	(68.9)	(96.5)	(86.9)	(66.0)	93.7)	(57.4)	(1.9)	(52.6)	47
Total	**90.4**	**89.0**	**86.2**	**72.9**	**58.2**	**88.9**	**80.8**	**68.9**	**78.9**	**57.1**	**8.5**	**60.2**	**219**

(*):Un-weighted values based on 0-25 cases
( ):Un-weighted values based on 25-50 cases
Note: The calculation is the same as the top panel of Table 6.1 (i.e., the child's age at vaccination is not taken into account). Children who were vaccinated at any time before the survey are included in the numerator.

6.2 Tetanus Toxoid

Millennium Development Goal five aims to reduce by three quarters the maternal mortality ratio, with one strategy being to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than one case of neonatal tetanus per 1,000 live births in every district. A World Fit for Children goal is to eliminate maternal and neonatal tetanus by 2005.

Prevention of maternal and neonatal tetanus is to ensure all pregnant women receive at least two doses of tetanus toxoid vaccine. However, if women have not received two doses of the vaccine during the pregnancy, they (and their newborn) are also considered to be protected if the following conditions are met:

- Received at least two doses of tetanus toxoid vaccine, the last within the prior three years;
- Received at least three doses, the last within the prior five years;
- Received at least four doses, the last within 10 years;
- Received at least five doses during lifetime.

Table 6.3 (CH.3) shows the protection status from tetanus of women who have had a live birth within the last 12 months. Overall, 55 per cent of women who had a birth during the two years preceding the survey had adequate protection against tetanus. These were likely to be younger women from higher wealth index households. The proportion of women receiving protection is higher among those from higher wealth index households (69 per cent) versus those from low wealth index households (48 per cent). Protection against tetanus is also higher among women with higher levels of education versus those with no education.

Table 6.3 (CH.3): Neonatal tetanus protection

Percentage of mothers with a birth in the last 12 months protected against neonatal tetanus, MICS Moyale district, Eastern Province, Kenya 2008

	Percentage of mothers with a birth in the last 12 months who:						
Characteristics	Received at least 2 doses during last pregnancy	Received at least 2 doses, the last within prior 3 years	Received at least 3 doses, last within prior 5 years	Received at least 4 doses, last within prior 10 years	Received at least 5 doses during lifetime	Protected against tetanus*	Number of mothers
Age							
15-19	(60.1)	(1.9)	(0.0)	(0.0)	(0.0)	(62.0)	41
20.-24	42.9	10.3	0.0	0.0	0.0	53.2	107
25-29	51.8	5.3	0.0	0.0	0.0	57.2	111
30-34	53.3	5.0	0.0	0.0	0.0	58.3	85
35-49	43.8	4.0	0.0	0.0	0.0	47.8	78
Education							
None	44.2	6.9	0.0	0.0	0.0	51.1	336
Primary	67.1	2.7	0.0	0.0	0.0	69.8	75
Secondary +	(78.9)	(0.0)	(0.0)	(0.0)	(0.0)	(78.9)	12
Wealth index							
Low	42.0	5.9	0.0	0.0	0.0	47.9	237
Medium	53.5	3.6	0.0	0.0	0.0	57.1	75
High	61.7	7.6	0.0	0.0	0.0	69.3	111
Total	**49.2**	**6.0**	**0.0**	**0.0**	**0.0**	**55.1**	**423**

( ): Un-weighted values based on 25-50 cases

Tetanus toxoid injections are given to women during pregnancy to protect infants from neonatal tetanus, a major cause of infant death that is due primarily to unsanitary conditions during childbirth. Two doses of tetanus toxoid during pregnancy offer full protection. However, if a woman was vaccinated during a previous pregnancy, she may only need a booster to give full protection. Five doses are thought to provide lifetime protection.

6.3 Oral Rehydration Treatment

Diarrhoea is the second leading cause of death among children under five worldwide. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in form of liquid stool. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

The goals are to: 1) reduce by one half deaths due to diarrhoea among children under five by 2010 compared to 2000 estimates (A World Fit for Children); and 2) reduce by two thirds the mortality rate among children under five by 2015 compared to 1990 (MDG four). In addition, the World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 per cent.

The indicators are:

- Prevalence of diarrhoea
- Oral Rehydration therapy (ORT)
- Home management of diarrhoea
- (ORT or increased fluids) and continued feeding

In the MICS questionnaire, mothers (or caretakers) were asked to report whether their child had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode, and whether this was more or less than what the child usually ate and drank.

The peak of diarrhoea prevalence occurs in the weaning period, among children aged between 6-23 months. Overall, 12 per cent of under five children had diarrhoea in the two weeks preceding the survey (Table 6.4(CH.4)). A comparable proportion of male and female children had diarrhoea within the two weeks preceding the survey.

Table 6.4 (CH.4) also shows the percentage of children receiving various types of recommended liquids during episodes of diarrhoea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add up to 100 per cent. About 44 per cent received fluids from ORS packets; 41 per cent received pre-packaged ORS fluids, and about 55 per cent received recommended homemade fluids. Overall, four in five (80 per cent) children with diarrhoea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF), while 20 per cent received no treatment.

Table 6.4 (CH.4): Oral rehydration treatment

Percentage of children aged 0-59 months with diarrhoea in the last two weeks and treatment with oral rehydration solution (ORS) or other oral rehydration treatment (ORT), MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who received: Fluid from ORS packet	Recom-mended homemade fluid	Pre-packaged ORS fluid	No treatment	ORT Use Rate	Number of children aged 0-59 months with diarrhoea
Sex								
Male	11.9	587	52.1	53.3	49.8	16.4	83.6	70
Female	11.9	532	36.0	56.9	30.4	23.3	76.7	63
Age								
<6 months	(*)	147	(*)	(*)	(*)	(*)	(*)	11
6-11 months	(*)	81	(*)	(*)	(*)	(*)	(*)	10
12-23 months	(18.9)	221	(45.0)	(62.8)	(41.3)	(19.5)	(80.5)	42
24-35 months	8.8	239	35.6	54.6	31.8	23.7	76.3	38
36-47 months	(*)	220	(*)	(*)	(*)	(*)	(*)	14
48-59 months	(*)	212	(*)	(*)	(*)	(*)	(*)	18
Mother's education								
None	10.3	906	42.4	50.7	44.1	23.5	76.5	94
Primary	(19.2)	(173)	(58.2)	(64.7)	(37.9)	(7.1)	(92.9)	33
Secondary +	(*)	(*)	(*) -	(*)	(*)	(*)	(*)	6
Wealth index								
Low	8.4	615	41.2	57.7	44.8	22.3	77.7	52
Medium	(22.8)	193	(42.9)	(38.0)	(42.1)	(24.4)	(75.6)	44
High	(11.9)	311	(50.8)	(71.7)	(32.8)	(10.4)	(89.6)	37
Total	**11.9**	**1,119**	**44.4**	**55.1**	**40.6**	**19.7**	**80.3**	**133**

(*):Un-weighted values based on 0-25 cases
( ):Un-weighted values based on 25-50 cases
Note: The percentages receiving various treatments will not add to 100 since some children may have received more than one type of treatment. The ORT use rate includes those who received oral rehydration salts from a packet or any appropriate household solution or pre-packaged ORS fluid.

As shown in Table 6.5 (CH.5), only a minimal percentage of the under five children who had diarrhoea during the two weeks preceding the survey were reported to have drank more than usual, while 99 per cent were reported to have drank the same or less. A similar 99 per cent reportedly ate much less or no food at all, contrary to expert advice. The information on home management of diarrhoea by background characteristics did not yield meaningful results due to lower frequencies of observations.

Table 6.5 (CH.5): Home management of diarrhoea

Percentage of children aged 0-59 months with diarrhoea in the last two weeks who took increased fluids and continued to feed during the episode, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who: Drank more	Drank the same or less	Ate somewhat less, same or more	Ate much less or none	Home management of diarrhea	Received ORT or increased fluids AND continued feeding	Number of children aged 0-59 months with diarrhoea
Sex									
Male	11.9	587	0.0	100.0	1.3	98.7	0.0	1.3	70
Female	11.9	532	1.8	98.2	1.2	98.8	0.0	1.2	63
Age									
0-11 months	(*)	228	(*)	(*)	(*)	(*)	(*)	(*)	18
12-23 months	(19.0)	233	(0.0)	(100.0)	(1.8)	(100)	(0.0)	(1.8)	44
24-35 months	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	39
36-47 months	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14
48-59 months	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Mother's education									
None	10.3	906	0.0	100.0	0.0	100.0	0.0	0.0	94
Primary	(19.2)	173	(3.5)	(96.5)	(2.3)	(97.7)	(0.0)	(2.3)	33
Secondary +	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6
Wealth index									
Low	8.4	615	0.0	100.0	1.5	98.5	0.0	1.5	52
Medium	(22.8)	193	(0.0)	(100.0)	(0.0)	(100.0)	(0.0)	(0.0)	44
High	(11.9)	311	(3.1)	(96.9)	(2.4)	(97.6)	(0.0)	(2.4)	37
Total	**11.9**	**1119**	**0.9**	**99.1**	**1.2**	**98.8**	**0.0**	**1.2**	**133**

(*): Not shown, based on less than 25 un-weighted cases.
( ): Not shown, based on 25-50 un-weighted cases.

6.4 Care Seeking and Antibiotic Treatment of Pneumonia

Pneumonia is one of the leading causes of deaths in children, and the use of antibiotics in children below five years with suspected pneumonia is a key intervention. A World Fit for Children goal is to reduce by one-third the deaths due to acute respiratory infections.

Children with suspected pneumonia are those who had an illness with a cough accompanied by rapid or difficult breathing, and whose symptoms were not due to a problem in the chest and a blocked nose. The indicators are:

- Prevalence of suspected pneumonia
- Care seeking for suspected pneumonia
- Antibiotic treatment for suspected pneumonia
- Knowledge of the danger signs of pneumonia

Table 6.6 (CH.6) presents the percentage of children aged between 0-59 months with suspected pneumonia in the last two weeks before the survey, care seeking behaviour, and the use of antibiotics for the treatment of the pneumonia by sex, age, mother's education and household wealth index. In Moyale, seven per cent of the children aged between 0-59 months were reported to have had acute respiratory infection. Among these children who had symptoms of pneumonia, 78 per cent were taken to an appropriate health service provider, 18 per cent were taken to private healthcare service providers, 56 per cent were treated at public health facilities and rest were taken to other sources which were predominantly shops. The few observations limited the analysis of disaggregated data for socio-economic characteristics.

Table 6.6 (CH.6): Care seeking for suspected pneumonia

Percentage of children aged 0-59 months were taken to a health provider in the last two weeks, Moyale district, 2008

			Number of children aged 0-59 months with suspected pneumonia											
			Public sources				Private sources				Other source			
Characteristics	Had acute respiratory infection[1]	Number of children aged 0-59 months	Govt. Hospital	Govt. health centre	Govt. health post	Other public *	Private hospital/ clinic	Private physician	Phar macy	Other private	Relative or friend	Shop	Trad. Practitioner	Any appropriate provider	Number of children aged 0-59 months with suspected pneumonia
Sex															
Male	(7.3)	587	(43.0)	(11.3)	(0.0)	(7.9)	(14.6)	(2.8)	(2.0)	(0.0))	(0.0)	(4.7)	(0.0)	(79.6)	43
Female	(7.3)	532	(43.0)	(10.6)	(0.0)	(8.1)	(13.1)	(0.0)	(0.0)	(3.1	(0.0)	(0.0)	(0.0)	(76.2)	39
Age															
0-11 months	(*)	208	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	10
12-23 months	(*)	233	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
24-35 months	(*)	234	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
36-47 months	(*)	224	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	12
48-59 months	(*)	221	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
Mother's education															
None	6.3	906	40.5	13.5	0.0	2.7	12.6	0.0	1.5	0.0	0.0	2.0	0.0	75.8	57
Primary	(*)	173	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Secondary +	(*)	40	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6
Wealth index															
Low	(6.7)	615	(38.7)	17.0	0.0	1.9	5.7	0.0	2.1	0.0	0.0	2.7	0.0	70.9	41
Medium	(*)	193	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	11
High	9.5	311	56.5	0.0	0.0	4.1	21.1	4.1	0.0	0.0	0.0	3.0	0.0	85.7	30
Total	**7.3**	**1,119**	**43.0**	**11.0**	**0.0**	**1.9**	**13.9**	**1.5**	**1.1**	**1.5**	**0.0**	**2.5**	**0.0**	**78.0**	**82**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

About 61 per cent of children with suspected pneumonia in the two weeks prior to the survey, received antibiotics treatment (Table 6.7).

Table 6.7 (CH.7): Antibiotic treatment of pneumonia

Percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment, Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of children aged 0-59 months with suspected pneumonia who received antibiotics in the last two weeks	Number of children aged 0-59 months with suspected pneumonia in the two weeks prior to the survey
Sex		
Male	(60.4)	43
Female	(60.8)	39
Age		
0-11 months	(*)	10
12-23 months	(*)	18
24-35 months	(*)	21
36-47 months	(*)	12
48-59 months	(*)	21
Mother's education		
None	63.5	57
Primary	(*)	18
Secondary +	(*)	6
Wealth index		
Low	(*)	41
Medium	(*)	11
High	(*)	30
Total	**60.6**	**82**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Mothers' knowledge of danger signs for pneumonia is an important determinant of care-seeking behaviour. Issues related to knowledge of danger signs of pneumonia are presented in Table 6.8 (CH.7A). Overall, about eight per cent of women know of the two danger signs of pneumonia – fast, and difficult breathing. Most women (81 per cent) identified developing fever as a symptom for taking a child to a health facility. Sixty-seven per cent mentioned 'getting sicker' as a cause for taking a child to the dispensary. The proportion of mothers who recognize the two danger signs of pneumonia does not vary so much by increasing levels of mother's education or household wealth index. While this proportion was 7 per cent among mothers with no education, the corresponding figure for those with secondary or higher was 9 per cent. Similarly, 7 per cent of mothers from low wealth index households recognize the two danger signs versus 8 per cent among those from high wealth index households.

Table 6.8 (CH.7A): Knowledge of the two danger signs of pneumonia

Percentage of mothers/caretakers of children aged 0-59 months by knowledge of types of symptoms for taking a child immediately to a health facility, and percentage of mothers/caretakers who recognize fast and difficult breathing as signs for seeking care immediately, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of mothers/caretakers of children aged 0-59 months who think that a child should be taken immediately to a health facility if the child:								Mothers/ caretakers who recognize the two danger signs of pneumonia*	Number of mothers/ caretakers of children aged 0-59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficulty breathing	Has blood in stool	Is drinking poorly	Has other symptoms		
Mother's education										
None	38.2	69.0	80.4	12.5	21.5	20.2	35.9	8.4	7.0	906
Primary	43.4	58.8	85.3	18.2	27.7	28.9	48.2	6.0	10.7	173
Secondary +	(37.0)	(62.6)	(67.0)	(15.6)	(35.0)	(24.6)	(31.4)	(7.0)	(8.60)	40
Wealth index										
Low	37.3	73.9	80.2	14.5	18.3	23.0	37.4	9.6	7.4	615
Medium	42.9	62.3	80.9	11.5	21.6	22.0	40.2	5.5	8.6	193
High	39.7	57.0	81.3	12.7	32.9	19.0	36.4	6.2	7.5	311
Total	**39.0**	**67.2**	**80.6**	**13.5**	**22.9**	**21.7**	**37.6**	**7.9**	**7.7**	**1119**

Percentage of mothers/caretakers who state fast AND difficult breathing as signs for taking a child to a health facility immediately
Note: The percentages will not add to 100 since some mothers/caretakers may have indicated more than one symptom.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

6.5 Solid Fuel Use

More than three billion people around the world rely on solid fuels (biomass and coal) for their basic energy needs, including cooking and heating. Cooking and heating with solid fuels leads to high levels of indoor smoke, which contains a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is products of incomplete combustion, including carbon monoxide (CO), polyaromatic hydrocarbons, sulphur dioxide (SO_2), and other toxic elements. Use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, low birth weight, cataracts and asthma. The primary indicator is the proportion of the population using solid fuels as the primary source of domestic energy for cooking.

Use of solid fuels for cooking is near universal in Moyale district, with 99 per cent of the households reportedly using them (Table 6.9 (CH.8)). Differentials with respect to household wealth index show all households with low or medium wealth index using solid fuel for cooking compared to 96 per cent among high wealth index households who use them. Households headed by a member with no education used solid fuels for cooking (100 per cent) whereas those headed by a member with secondary education or higher also used alternative sources of cooking fuels. Wood was the preferred source of solid fuel and was used by 87 per cent of the households, with charcoal coming second at 11 per cent. While increasing levels of education of the household head and improving levels of the household wealth index significantly lowered the use of wood, both factors raised the use of charcoal, suggesting the two sources are likely to be direct substitutes.

Table 6.9 (CH.8): Solid fuel use

Percentage distribution of households according to type of cooking fuel, and percentage of households using solid fuels for cooking, MICS Moyale district Eastern Province, Kenya 2008

	Percentage of households using:										
Characteristic	Liquefied Petroleum Gas (LPG)	Natural Gas	Biogas	Kerosene	Char-coal	Wood	Straw, shrubs, grass	Other source	Total	Solid fuels for cooking *	Number of house-holds
Education of household head											
None	0.0	-	0.0	-	8.8	90.8	0.3	0.1	100.0	99.9	865
Primary	0.0	-	0.0	1.6	15.1	82.4	0.9	-	100.0	98.4	159
Secondary +	0.0	1.7	0.0	6.2	30.1	60.5	-	1.6	100.0	90.6	93
Wealth index											
Low	0.0	0.0	0.0	0.0	1.0	98.5	0.4	0.0	100.0	100.0	643
Medium	0.0	0.0	0.0	0.0	9.4	90.6	0.0	0.0	100.0	100.0	180
High	0.0	0.5	0.0	2.8	35.4	60.1	0.3	0.8	100.0	95.8	294
Total	**0.0**	**0.1**	**0.0**	**0.7**	**11.4**	**87.1**	**0.3**	**0.2**	**100.0**	**98.9**	**1117**

6.6 Malaria

Malaria is one of the leading causes of death among children below five years. It also contributes to anaemia in children and is a common cause of school absenteeism. Preventive measures, especially the use of mosquito nets treated with insecticide (ITNs) can dramatically reduce malaria mortality rates among children. In areas where malaria is common, international recommendations suggest treating any fever in children as if it were malaria and immediately giving the child a full course of recommended anti-malarial tablets. Children with severe malaria symptoms, such as fever or convulsions, should be taken to a health facility. Also, children

recovering from malaria should be given extra liquids and food, and younger children should continue breastfeeding.

The questionnaire incorporated questions on the availability and use of bed nets, both at household level and among children under five years of age, as well as anti-malarial treatment, and intermittent preventive therapy (ITP) for malaria.

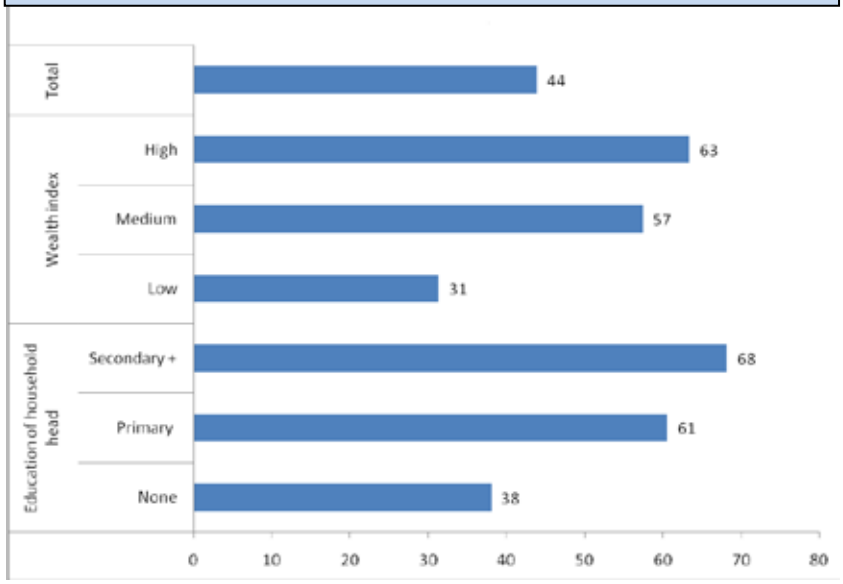
Table 6.10 (CH.10) indicates that in Moyale, 44 per cent of households have at least one mosquito net and a similar proportion (43.8 per cent) of the households has at least one ITN. Slightly over a quarter of the households report having two or more mosquito nets, with the mean number of nets per households in the district being 2.1 nets. The likelihood of possessing a mosquito net or an ITN is higher for households with better educated household heads (69 per cent secondary or higher education compared to 38 per cent for households headed by a member with no education.). The proportion of household with mosquito nets increases with increasing levels of the household wealth index. For example, 31 per cent of households from low wealth index had at least one ITN compared to 63 per cent among those from high wealth index households. This result is also well illustrated in figure 6.1.

Table 6.10 (CH.10): Availability of insecticide treated nets

Percentage of households with at least one insecticide treated net (ITN), MICS Moyale district, Eastern Province, Kenya 2008

	Percentage of households with				
Characteristics	At least one mosquito net	Two or more mosquito nets	At least one insecticide treated net (ITN)*	Mean number of mosquito nets per household	Number of households
Education of household head					
None	38.2	22.6	38.0	2.2	861
Primary	60.5	35.7	60.5	2.1	164
Secondary +	69.4	45.9	68.1	2.1	93
Wealth index					
Low	31.4	14.5	31.3	1.6	647
Medium	57.8	37.4	57.4	2.1	183
High	63.7	46.3	63.3	2.7	287
Total	**44.0**	**26.4**	**43.8**	**2.1**	**1117**

Figure 6.1: Percentage of households with at least one treated mosquito net, MICS Moyale district, 2008



Results indicate that 61 per cent of the children under five did not sleep under any net. Children who did not sleep under any net were mostly from low wealth index households (Table 6.11). There were no significant gender disparities in the proportion of children who did not sleep under any bednet. Generally the proportion of children using a net or ITN declined with age of child.

Table 6.11 (CH.11): Children sleeping under bed nets

Percentage of children aged 0-59 months who slept under an insecticide treated net during the previous night, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of children who:						Number of children aged 0-59 months
	Slept under a bed net*	Slept under an insecticide treated net**	Slept under an untreated net	Slept under a net but don't know if treated	Don't know if slept under a net	Did not sleep under a bednet	
Sex							
Male	39.3	38.5	0.9	0.0	0.0	60.7	587
Female	39.2	39.0	0.2	0.0	0.0	60.8	532
Age							
0-11 months	43.9	42.7	1.2	0.0	0.0	56.1	208
12-23 months	44.1	43.2	1.0	0.0	0.0	55.9	233
24-35 months	39.6	39.6	0.0	0.0	0.0	60.4	234
36-47 months	37.6	37.6	0.0	0.0	0.0	62.4	224
48-59 months	31.1	30.4	0.7	0.0	0.0	68.9	221
Wealth index							
Low	28.3	28.1	0.2	0.0	0.0	71.7	615
Medium	51.5	50.9	0.6	0.0	0.0	48.5	193
High	53.4	52.2	1.3	0.0	0.0	46.6	311
Total	**39.3**	**38.7**	**0.6**	**0.0**	**0.0**	**60.7**	**1,119**

Questions on the prevalence and treatment of fever among children under age five were addressed to mothers or caretakers. Table 6.12 (CH.12) shows that 17 per cent of under five children had been ill with fever in the two weeks prior to the survey. Prevalence is greater among male children (19 per cent) than females (15 per cent). . Fever prevalence across levels of the household wealth index shows that the proportions were lowest among children from medium wealth index households and highest among those from low wealth index households. The proportion of children with fever was comparable among children with mothers educated up to primary (21 per cent) and secondary or higher (20 per cent) levels of education, figures that were surprisingly higher than the 17 per cent observed for children with mothers having no education.

Mothers were asked to report all of the medicines given to a child to treat the fever, including both medicines given at home and medicines given or prescribed at a health facility. Nearly three out of five children (57 per cent) with fever in the last two weeks were treated with an "appropriate" anti-malarial drug, with 54 per cent receiving anti-malarial drugs within 24 hours of onset of the symptoms. There are some gender differentials in seeking appropriate care. For example, while appropriate anti-malarial drug use stood at 61 per cent for male children, the rate was only 50 per cent for female children. Overall, children whose mothers are educated up to secondary or higher and children from high wealth index households are more likely to receive an appropriate anti-malarial drug and also receiving them within 24 hours of the onset of symptoms. For example, only 48 per cent of the children from low wealth index households received an appropriate anti-malarial drug within 24 hours of onset of symptoms versus80 per cent for children from high wealth index households.

Table 6.12 (CH.12): Treatment of children with anti-malarial drugs

Percentage of children aged 0-59 months who were ill with fever in the last two weeks who received anti-malarial drugs, MICS Moyale district,2008

			Children with a fever in the last two weeks who were treated with:													
			Anti-malarials:							Other medications:						
Characteristics	Had a fever in last two weeks	Number of children aged 0-59 months	SP/ Fansidar	Chloroquine	Amodiaquine	Quinine	Artemisinin based combinations	Other anti-malarial	Any appropriate anti-malarial drug	Paracetamol/ Panadol/ Acetaminophen	Aspirin	Ibuprofen	Other	Don't know	Any appropriate anti-malarial drug within 24 hours of onset of symptoms*	Number of children with fever in last two weeks
Sex																
Male	19.4	587	28.3	37.9	35.0	8.1	0.6	0.0	61.1	34.6	32.9	6.0	0.0	0.0	59.3	114
Female	15.0	532	22.0	28.9	23.7	19.3	0.8	0.0	50.2	36.8	38.6	8.6	2.6	0.0	46.9	80
Age																
0-11 months	(*)	208	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
12-23 months	(17.5)	233	(24.1)	(32.5)	(21.7)	(7.8)	(0.0)	(0.0)	(47.3)	(48.9)	(52.1)	(12.9)	(1.9)	(0.0)	(45.8)	41
24-35 months	(18.8)	234	(24.7)	(28.5)	(23.3)	(7.2)	(1.5)	(0.0)	(53.4)	(34.2)	(32.9)	(6.1)	(0.0)	(0.0)	(50.1)	44
36-47 months	(16.8)	224	(20.1)	(30.8)	(32.3)	(21.5)	(0.0)	(0.0)	(55.8)	(29.7)	(33.1)	(0.0)	(0.0)	(0.0)	(52.8)	38
48-59 months	(22.7)	221	(38.3)	(40.4)	(33.5)	(19.0)	(1.3)	(0.0)	(69.8)	(26.0)	(20.8)	(9.0)	(0.0)	(0.0)	(67.0)	50
Mother's education																
None	16.5	906	25.4	36.0	30.5	11.0	0.0	0.0	53.7	32.7	32.1	7.0	1.4	0.0	52.2	150
Primary	20.8	173	(21.6)	(28.0)	(30.3)	(22.7)	(3.7)	(0.0)	(67.2)	(45.3)	(51.7)	(9.2)	(0.0)	(0.0)	(60.3)	36
Secondary +	20.2	40	49.0	28.4	28.8	0.0	0.0	0.0	63.4	42.8	20.6	0.0	0.0	0.0	63.4	8
Wealth index																
Low	19.0	615	25.5	31.8	25.0	7.9	0.0	0.0	48.1	37.6	37.1	5.1	1.8	0.0	46.3	117
Medium	14.1	193	26.9	16.6	11.5	6.9	0.0	0.0	41.5	53.0	58.5	16.6	0.0	0.0	41.5	27
High	16.1	311	25.5	49.3	53.3	27.2	2.7	0.0	84.6	21.0	18.3	6.6	0.0	0.0	79.6	50
Total	**17.3**	**1,119**	**25.7**	**34.2**	**30.4**	**12.7**	**0.7**	**0.0**	**56.6**	**35.5**	**35.3**	**7.1**	**1.1**	**0.0**	**54.2**	**194**

The percentages given various drugs will not add to 100 since some children may have been given more than one type of drug.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

"Appropriate" anti-malarial drugs include Chloroquine, SP/Fansidar, amodiaquine, quinine, artemisinin combination drugs, etc. In Moyale, the most widely used anti-malarial drugs were chloroquine (34 per cent), amodiaquine (30 per cent) and SP/Fansidar (26 per cent). A large percentage of children (45 per cent) were given other types of medicines that are not anti-malarials, including anti-pyretics such as paracetemol, panadol, aspirin, or ibuprofen. Among these, paracetamol and aspirin were mostly used (35 per cent).

Pregnant women living in places where malaria is highly prevalent are four times more likely than other adults to get malaria and twice as likely to die of the disease. Once infected, pregnant women risk anemia, premature delivery and stillbirth. Their babies are likely to be of low birth weight, which makes them unlikely to survive their first year of life. For this reason, steps are taken to protect pregnant women by distributing ITNs and treatment during antenatal check-ups with drugs that prevent malaria infection (Intermittent preventive treatment, or IPT). In Moyale district MICS, women were asked about any medicines they had received in their last pregnancy during the two years preceding the survey. Women are considered to have received intermittent preventive therapy if they have received at least two doses of SP/Fansidar during the pregnancy.

Information on Intermittent preventive treatment for malaria in pregnant women who gave birth in the two years preceding the survey is summarized in Table 6.13 (CH.13). Only 22 per cent of mothers who delivered a child during the two year period preceding the survey received medicine to prevent malaria during pregnancy. The proportion of women receiving IPT increased with improving levels of the mother's education as well as by increasing levels of the household wealth index. SP/Fansidar was the most common form of drug used for IPT of malaria.

Table 6.13 (CH.13): Intermittent preventive treatment for malaria

Percentage of women aged between15-49 years who gave birth during the two years preceding the survey who received intermittent preventive therapy (IPT) for malaria during pregnancy, Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of pregnant women who took:						Number of women who gave birth in prior two years
	Medicine to prevent malaria during pregnancy	SP/Fansidar only one time	SP/Fansidar two or more times*	Chloroquine	Other medicines	Don't know	
Education							
None	20.5	9.6	9.3	1.1	0.6	0.2	336
Primary	25.4	7.0	14.9	0.7	1.4	1.4	75
Secondary +	(*)	(*)	(*)	(*)	(*)	(*)	12
Wealth index							
Low	16.6	7.5	7.1	1.5	0.5	0.0	237
Medium	24.6	9.2	14.1	0.0	0.0	1.4	75
High	32.1	14.6	15.2	0.7	1.6	0.6	111
Total	**22.1**	**9.7**	**10.5**	**1.0**	**0.7**	**0.4**	**423**

(*) based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

7.1 Water

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants which carry harmful effects on human health. In addition to its association with diseases, access to drinking water is particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often over long distances.

The MDG number 7 is to reduce by half, between 1990 and 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The World Fit for Children goal calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The lists of indicators used in MICS are as follows:

Water

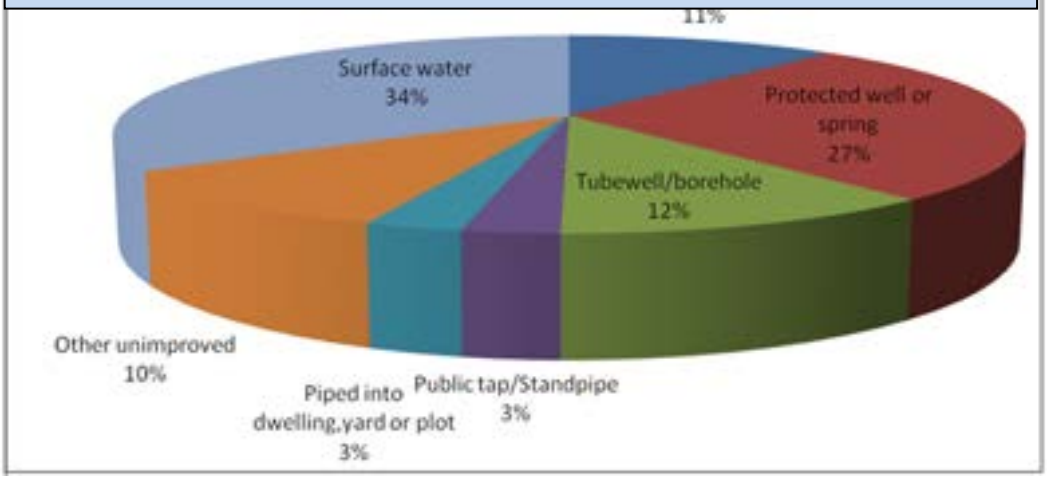
- Use of improved drinking water sources
- Use of adequate water treatment method
- Time to source of drinking water
- Person collecting drinking water

Sanitation

- Use of improved sanitation facilities
- Sanitary disposal of child's faeces

The distribution of the population by source of drinking water is shown in Table 7.1 (EN.1) and Figure 7.1. The population using improved sources of drinking water are those using any of the following types of supply: piped water (into dwelling, yard or plot), public tap/ standpipe, tube well/ borehole, protected well, protected spring, rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking.

Figure 7.1: Percentage distributions of household members by source of drinking water, Moyale, 2008



Overall, the results indicate that 46 per cent of the population in the district has access to improved drinking water sources. The main sources of such water were protected wells (23 per cent) and tubewells or boreholes (22 per cent). At the aggregated level, moving from low to high wealth index households improved access to improved sources of drinking water. For example, only 39 per cent of the population living in low wealth index households use drinking water from improved sources compared to 62 per cent of population living in households with high wealth index.

Surface water (35 per cent share) and unprotected well (11 per cent) are the main unimproved sources of drinking water, and these are mainly used by households from the low wealth index category.

Table 7.1 (EN.1): Use of improved water sources

Percentage distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, MICS Moyale district, Eastern Province, Kenya 2008

	Main source of drinking water															
	Improved sources							Unimproved sources								
Characteristics	Piped into dwelling	Piped into yard/ plot	Public tap/ stand-pipe	Piped water from neighbour	Tube-well/ bore-hole	Protected well	Protected spring	Un-protected well	Un-protected spring	Tanker truck	Cart with tank/ drum	Surface water	Other	Total	Improved source of drinking water	Number of household members
Education of household head																
None	0.5	1.8	2.7	0.3	2.0	22.3	5.6	10.8	0.8	0.5	5.7	35.2	0.7	100.0	46.3	4,979
Primary	1.4	1.6	3.0	1.0	1.8	19.2	6.2	14.5	3.8	0.0	2.2	37.0	1.2	100.0	41.4	880
Secondary +	0.0	2.9	8.6	0.0	4.8	33.1	2.7	5.5	2.2	0.0	5.9	29.4	0.0	100.0	57.0	419
Wealth index																
Low	0.0	0.0	2.0	0.0	3.1	12.4	6.9	8.9	1.2	0.0	7.0	43.2	1.0	100.0	38.6	3,510
Medium	1.3	0.0	2.2	0.8	0.5	32.1	2.9	19.3	2.7	0.0	2.7	28.2	0.6	100.0	46.6	1,112
High	1.5	7.1	6.2	0.9	1.4	38.0	4.3	9.7	0.6	1.6	3.1	22.6	0.0	100.0	62.4	1,656
Total	**0.6**	**1.9**	**3.1**	**0.4**	**22.2**	**22.6**	**5.5**	**11.0**	**1.3**	**0.4**	**5.2**	**35.1**	**0.7**	**100.0**	**46.3**	**6,278**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Use of in-house water treatment is presented in Table 7.2 (EN.2). Households were asked of ways they may be treating water at home to make it safer to drink. Boiling, adding bleach or chlorine, using a water filter, and using solar disinfection were considered as proper treatment of drinking water. The table shows the percentages of households using appropriate water treatment methods, separately for all households, and for households using improved and unimproved drinking water sources.

About 73 per cent of households in Moyale do not use any domestic method for water treatment. With majority of those not treating water coming from households categorised a low wealth index households as well as those educated by members with no education. Adding bleach/chlorine is the most common methods used for those treating water at home. The rate of use of appropriate treatment methods was the same for households sourcing drinking water from unimproved and improved sources.

Table 7.2 (EN.2): Household water treatment

Percentage distribution of household population according to drinking water treatment method used in the household, and percentage of household population that applied an appropriate water treatment method MICS Moyale district, Eastern Province, Kenya 2008

	Water treatment method used in the household							All drinking water sources		Improved drinking water sources		Unimproved drinking water sources	
Characteristics	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Let it stand and settle	Other	Appropriate water treatment method	Number of household members	Appropriate water treatment method	Number of household members	Appropriate water treatment method:	Number of household members
Education of household head													
None	75.9	1.9	21.3	0.1	0.0	0.0	1.1	23.0	4,979	22.9	2,289	23.1	2,690
Primary	66.1	4.0	28.2	0.0	0.0	0.0	2.5	32.3	880	27.3	355	35.6	525
Secondary +	50.5	9.9	32.2	0.0	0.0	1.0	9.9	40.3	419	46.6	239	31.8	180
Wealth index													
Low	75.2	1.0	23.2	0.2	0.0	0.0	0.7	24.2	3,510	24.4	1,355	24.1	2,155
Medium	73.3	2.5	22.7	0.0	0.0	0.4	1.6	25.2	1,112	21.4	510	28.3	602
High	67.6	6.6	22.8	0.0	0.0	0.1	4.6	28.3	1,656	28.7	1,018	27.5	637
Total	**72.8**	**2.7**	**23.0**	**0.1**	**0.0**	**0.1**	**1.9**	**25.4**	**6,278**	**22.5**	**2,883**	**25.5**	**3,395**

Note that multiple response categories may be used and responses may total to more than 100 per cent.

The low rate of provision of water within and around the residential premises highlights concern with the time taken to fetch water (Table 7.3 (EN.3)). Note that these results refer to one roundtrip from home to drinking water source and back. Information on the number of trips made in one day was not collected.

Table 7.3 (EN.3) shows that, excluding those households with water on the premises, the average time for a round trip to collect water from a source is nearly two hours (111 minutes). The table further shows that a majority of households (61 per cent) spend more than one hour to the source of drinking water, with the proportion declining with increasing levels of household wealth index.

Table 7.3 (EN.3): Time to source of water

Percentage distribution of households according to time to go to source of drinking water, get water and return, and mean time to source of drinking water, Moyale district, Eastern Province, Kenya 2008

	Time to source of drinking water								
Characteristics	Water on premises	Less than 15 minutes	15 minutes to less than 30 minutes	30 minutes to less than 1 hour	1 hour or more	Don't know	Total	Mean time to source of drinking water*	Number of households
Education of household head									
None	2.0	6.4	6.9	22.8	61.6	0.2	100.0	114.4	865
Primary	4.5	8.0	4.8	22.4	60.2	0.0	100.0	96.4	159
Secondary +	8.6	7.2	4.6	19.2	59.5	0.9	100.0	106.4	93
Wealth index									
Low	0.3	6.7	4.9	24.5	63.3	0.3	100.0	125.0	643
Medium	2.9	6.4	7.1	21.1	62.5	0.0	100.0	81.0	180
High	8.8	7.0	9.3	18.7	55.9	0.3	100.0	98.0	294
Total	**2.9**	**6.7**	**6.4**	**22.4**	**61.2**	**0.2**	**100.0**	**111.2**	**1,117**

The mean time to source of drinking water is calculated based on those households that do not have water on the premises.

As expected, an adult woman collected water in more than 80 per cent of the households where water is not on the premises (Table 7.4 (EN.4)). Adult men are the next most significant drawers of water (17 per cent). Among the younger people, females under 15 had a greater role in collecting water than their male counterparts (eight per cent compared to only two per cent).

Table 7.4 (EN.4): Person collecting water

Percentage distribution of households according to the person collecting drinking water used in the household, Moyale district, 2008

Characteristics	Person collecting drinking water*								Number of households
	Adult woman	Adult man	Female child under age 15	Male child under age 15	Adult woman and child	Adult man and child	Adult man and woman	Don't know	
Education of household head									
None	85.0	14.5	9.1	1.9	6.1	0.0	6.2	0.0	865
Primary	80.9	15.4	5.0	0.0	3.1	.9	1.8	0.0	159
Secondary +	53.4	39.4	3.9	2.8	3.8	1.6	2.7	0.0	93
Wealth index									
Low	90.7	10.8	7.4	2.3	5.1	0.2	5.8	0.0	643
Medium	84.7	14.2	12.4	2.1	8.7	0.8	6.7	0.0	180
High	60.4	31.0	6.9	0.3	4.4	0.0	3.1	0.0	294
Total	**81.8**	**16.7**	**8.1**	**1.7**	**5.5**	**0.3**	**5.3**	**0.0**	**1,117**

*Total per cent may add to more than 100.0 due to multiple responses.

7.2 Sanitation

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. Improved sanitation facilities for excreta disposal include: flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine; pit latrine with slab; and composting toilet. Table 7.5 (EN5) shows the percentage distribution of the household population by the type of toilet facility used. Sanitary facilities were classified into improved and unimproved sanitation facilities.

Nearly two in every five households (39 per cent) have no facilities and use bush and/or field for excreta disposal. The proportion of those with no toilet facilities was higher among households categorised as low wealth index versus those from medium and high wealth index. Twenty eight per cent of the population of Moyale is living in households using improved sanitation facilities with less than two per cent of the population using flush toilets connected to sewerage systems or septic tanks or pit latrines. The most common sanitary means of excreta disposal among unimproved methods is pit latrine without slab/open pit sanitation (32 per cent). The findings indicate that use of improved sanitation facilities increases with increasing levels of the household wealth index.

Table 7.5 (EN.5): Use of sanitary means of excreta disposal

Percentage distribution of household population according to type of toilet facility used by the household, and the percentage of household population using sanitary means of excreta disposal, Moyale district, 2008

	Type of toilet facility used by household																
	Improved sanitation facility							Unimproved sanitation facility									
	Flush/pour flush to:																
Characteristics	Piped sewer system	Septic tank	Pit latrine	Ventilated improved pit latrine	Pit latrine with slab	Pit latrine with slab and cover	Compos-ting toilet	Flush/ pour flush to some-where else	Flush/ pour flush to unknown place/ not sure/ don't know	Pit latrine without slab/ open pit	Bucket	Hanging toilet/ hanging latrine	Other/ Missing	No facilities/ bush/ field	Total	Percentage of population using sanitary means of excreta disposal*	Number of household members
Education of household head																	
None	0.0	0.0	0.1	4.3	4.2	16.9	0.1	0.0	0.0	30.3	0.0	0.1	0.6	43.4	100.0	25.5	4,979
Primary	0.0	0.0	0.0	6.2	6.7	25.7	0.0	0.0	0.0	36.4	0.0	0.0	0.0	25.1	100.0	38.6	880
Secondary +	0.0	0.0	0.0	14.1	5.1	20.0	0.0	0.0	0.0	45.0	0.0	0.0	3.4	12.5	100.0	39.2	419
Wealth index																	
Low	0.0	0.0	0.0	3.6	2.6	10.6	0.1	0.0	0.0	18.9	0.0	0.0	0.5	63.8	100.0	16.9	3,510
Medium	0.0	0.0	0.3	3.9	7.3	19.8	0.0	0.0	0.0	52.4	0.0	0.0	1.4	14.8	100.0	31.3	1,112
High	0.0	0.0	0.0	9.5	7.2	33.7	0.0	0.0	0.0	46.7	0.0	0.2	0.8	1.9	100.0	50.4	1,656
Total	**0.0**	**0.0**	**0.1**	**5.2**	**4.6**	**18.3**	**0.1**	**0.0**	**0.0**	**32.2**	**0.0**	**0.1**	**0.7**	**38.8**	**100.0**	**28.3**	**6,278**

The manner in which a child's faeces are disposed poses serious threats to healthy living, and can contribute to an unhygienic environment, as well as facilitating easy transmission of diseases. The study therefore examined what was done to dispose off stools from children. Safe disposal of a child's faeces is disposing of the stool, involves using a toilet or by rinsing the stool into a toilet or latrine. Disposal of faeces of children 0-2 years of age is presented in Table 7.6 (EN.6). For Moyale districts, about one out of every two children (55 per cent) aged 0-2 years had their stool put or rinsed into a toilet or latrine as the mode of disposal, while that for 16 per cent of the children was thrown into the garbage (solid waste). Safe disposal of child stools increases with improving levels of household wealth index.

The proportion of children whose stools are safely disposed increases from 50 per cent for children of mothers with no education to 76 per cent for those with mothers having primary level education. Similarly, safe disposal of children's stool increases from 30 per cent in low wealth index households to 79 per cent in medium and 88 per cent in high index households.

Table 7.6 (EN.6): Disposal of child's faeces

Percentage distribution of children aged 0-2 years according to place of disposal of child's faeces, and the percentage of children aged 0-2 years whose stools are disposed of safely, MICS Moyale district, 2008

	Place of disposal of child's faeces									Proportion of children whose stools are disposed of safely	Number of children aged 0-2 years
Characteristics	Child used toilet	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Buried	Left in the open	Other	Don't know/ missing	Total		
Mother's education											
None	0.4	49.3	9.1	18.2	0.6	12.7	8.0	1.3	100.0	49.6	549
Primary	0.7	75.3	7.8	7.9	2.3	2.9	3.2	0.0	100.0	75.9	112
Secondary +	(3.5)	(84.7)	(11.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(88.3)	25
Wealth index											
Low	0.3	29.7	8.0	28.0	0.8	19.7	11.8	1.4	100.0	30.1	366
Medium	0.7	78.3	10.2	2.7	1.9	0.9	3.2	0.9	100.0	79.0	131
High	0.8	87.0	10.1	1.6	0.0	0.0	0.0	0.6	100.0	87.7	190
Total	**0.5**	**54.8**	**9.0**	**15.9**	**0.8**	**10.7**	**6.9**	**1.1**	**100.0**	**55.4**	**686**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

An overview of the proportion of household members using improved sources of drinking water *and* sanitary means of excreta disposal is summarized in Table 7.7 (EN.7). Twenty-two per cent of household members use both improved sources of drinking water and sanitary means of excreta disposal. This proportion was observed to increase with improving levels of the household head as well as improving levels of the household wealth index.

Table 7.7 (EN.7): Use of improved water sources and improved sanitation

Percentage of household population using both improved drinking water sources and sanitary means of excreta disposal, MICS Moyale district, 2008

	Percentage of household population:			
Characteristics	Using improved sources of drinking water	Using sanitary means of excreta disposal	Using improved sources of drinking water and using sanitary means of excreta disposal	Number of household members
Education of household head				
None	46.3	40.4	21.5	4,979
Primary	41.4	50.5	20.4	880
Secondary +	57.0	64.1	31.4	419
Wealth index				
Low	38.6	25.9	11.8	3,510
Medium	46.6	64.8	33.8	1,112
High	62.4	66.1	35.7	1,656
Total	**46.3**	**43.4**	**22.0**	**6,278**

Reproductive Health 8

This chapter presents information about fertility, marriage, contraception, unmet need for contraceptives and antenatal care use in Moyale district.

8.1 Fertility

Achieving national goals is directly linked to fertility levels and the resources available to support a county's population. Studies have shown that, in most developing countries, resources are meagre and inadequate to support its population and yet it is very important to balance the population growth. To achieve this balanced growth for the country, each and every district has to play its role. To develop programs to target the fertility reduction, timely provision of information about prevailing fertility levels is a crucial component. In MICS, birth histories of women aged 15-49 years from the sampled households were collected to measure the fertility level in Moyale District. Birth histories include details of all children ever born to a woman, such as child's name, sex, month and year of birth, survival status and if dead, the age at death.

Table 8.1 presents the measures of current fertility levels in Moyale District for the three-year period preceding the survey, corresponding to the period from mid-2005 to mid-2008. Current fertility measures such as age-specific fertility rates (ASFRs) and total fertility rate (TFR) are presented. ASFR are calculated by dividing the number of births to women in a specific age group by the number of women years lived during a given period. The TFR is defined as the average number of children a woman would have if she went through her entire reproductive period (15-49 years) reproducing at the prevailing ASFR.

Table 8.1: Current fertility

Age specific fertility rates (ASFR) and total fertility rate (TFR) for the 3-year preceding the survey, MICS Moyale district, 2008

Age group	Total
15-19	191
20-24	268
25-29	293
30-34	253
35-39	145
40-44	98
45-49	23
TFR	**6.4**

TFR: Total fertility rate for women age 15-49 years expressed per woman.

The total fertility rate in Moyale district is 6.4 children per woman for the three year period preceding the survey (mid-2005 to mid 2008). Fertility peaks at age 25-29 years. The adolescent age group, i.e., 15-19 years contributed 15 per cent to total fertility, depicting a high prevalence of teenage pregnancy in the district. Nearly 80 per cent of the total fertility is accounted for by ages below 35 years, while the contribution of older women 40-49 years is less than 10 per cent.

The percentage distribution of all women and married women based on the number of children ever born and living is shown in Table 8.2. Among the currently married women aged 15-49 years, the mean number of children ever born is 4.5 and that of surviving children is 4.2. These

numbers however drop to 3.6 and 3.4 respectively, when all the women in this age bracket are considered.

Table 8.2: Children ever born and living

Percentage distribution of all women and currently married women by number of children ever born, and mean number of children ever born and living, according to age groups, MICS Moyale district, 2008

Age group	Number of children ever born									Total	Number of women	Mean number of children	
	0	1	2	3	4	5	6	7	8+			Ever born	Living
							All women						
15-19	76.9	16.7	4.3	2.1	0.0	0.0	0.0	0.0	0.0	100.0	204	1.4	1.4
20-24	28.1	21.6	25.1	14.2	4.9	4.2	1.9	0.0	0.0	100.0	204	2.3	2.2
25-29	10.4	9.7	18.9	21.7	19.1	9.8	4.9	2.8	2.7	100.0	191	3.5	3.4
30-34	0.9	4.4	7.0	12.1	21.5	17.9	14.0	12.2	10.1	100.0	158	4.9	4.8
35-39	1.3	0.7	0.5	10.7	11.6	15.2	14.0	23.0	22.9	100.0	111	6.3	6.0
40-44	0.0	0.8	1.1	6.0	3.0	9.5	16.5	17.6	45.5	100.0	103	7.6	7.1
45-49	1.9	0.0	1.9	6.0	9.0	7.3	23.4	12.5	38.1	100.0	60	8.0	7.3
Total	**23.1**	**10.2**	**10.7**	**11.2**	**9.9**	**8.4**	**7.9**	**7.4**	**11.3**	**100.0**	**1,031**	**3.6**	**3.4**
							Currently Married Women						
15-19	29.0	49.6	14.4	6.9	0.0	0.0	0.0	0.0	0.0	100.0	61	1.0	1.0
20-24	10.0	24.3	33.5	17.5	6.5	5.6	2.5	0.0	0.0	100.0	153	2.1	2.0
25-29	3.3	10.6	18.9	23.8	20.6	11.0	5.3	3.3	3.2	100.0	165	3.5	3.4
30-34	1.0	3.8	6.8	11.0	21.9	18.2	14.9	12.1	10.3	100.0	144	5.0	4.8
35-39	1.5	0.8	0.5	9.1	10.4	15.2	14.8	23.0	24.5	100.0	101	6.3	6.0
40-44	0.0	0.0	1.2	6.5	3.2	8.6	16.3	18.1	46.0	100.0	95	7.7	7.1
45-49	2.2	0.0	2.2	5.9	10.5	8.5	18.9	11.7	40.0	100.0	52	7.9	7.2
Total	**5.5**	**11.8**	**13.5**	**13.6**	**12.3**	**10.5**	**9.6**	**9.0**	**14.2**	**100.0**	**770**	**4.5**	**4.2**

8.2 Teenage Pregnancy and Motherhood

Reducing pregnancy among adolescents is one of the flagship reproductive health programmes of the Kenya government. The proportion of women age 15-19 years who have given birth, or are currently pregnant and those who have began child bearing are shown in Table 8.3. Twenty nine per cent of women aged between 15-19 years have began child bearing i.e. have either given birth to at least one child or are pregnant with the first child. This proportion is highest among women with no education (47 per cent) and stands at 14 per cent among those with primary education.

Table 8.3: Teenage pregnancy and motherhood

Percentage of women age 15-19 years who are mothers or pregnant with their first child and percentage who have begun child bearing, MICS Moyale district, 2008

Characteristic	Percentage who: Have had a live birth	Percentage who: Are pregnant with first child	Percentage who have began child bearing	Number of women
Age				
15	(2.9)	(0.0)	(2.9)	47
16	(15.9)	(0.0)	(15.9)	36
17	(28.4)	(0.0)	(28.4)	29
18	29.0	12.8	41.8	67
19	(*)	(*)	(*)	24
Education				
None	37.0	9.6	46.7	98
Primary	11.9	2.5	14.4	92
Secondary +	(*)	(*)	(*)	14
Wealth index				
Low	22.7	5.4	28.1	115
Medium	(20.0)	(.0)	(20.0)	39
High	(26.5)	(11.0)	(37.5)	49
Total	**23.1**	**5.7**	**28.9**	**204**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

8.3 Contraception

Appropriate family planning is important for the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the number of children. A World Fit for Children goal is to ensure access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many.

Ninety-three per cent of women aged 15-49 years were not using any contraception method. They were likely to be poorly educated and from low wealth status households (Table 8.4 (RH.1)). Approximately seven per cent of women currently married or in union reported current use of contraception, with nearly all of them using a modern method. The most popular method currently used is the injection-- used by about four per cent of women who are married or in union. Use of all the other forms of modern contraception is low. Younger women are far less likely to use contraception than older women. Contraceptive prevalence is highest among the 35-39 age (nine per cent) and lowest among the 45-49 age who did not use any contraceptive method.

The level of education of the women and wealth index of the household are important factors in influencing contraceptive use. Contraceptive prevalence is highest (14 per cent) among women from high wealth index households and lowest (three per cent) among women from low wealth index households. Similarly, the percentage of women using any method of contraception doubles from five per cent among those with no education to 10 per cent among women with primary education, and increases to 37 per cent among women with secondary education or higher.

Table 8.4 (RH.1): Use of contraception

Percentage of women aged 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, MICS Moyale district, 2008

		Percentage of women (currently married or in union) who are using:																
Characteristics	Not using any method	Female sterilization	Male sterilization	Pill	IUD	Injections	Implants	Condom	Female condom	Diaphragm/ foam/jelly	LAM	Periodic abstinence	Other	Total	Any modern method	Any traditional method	Any method *	Number of women
Age																		
15-19	95.4	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4.6	0.0	4.6	61
20-24	92.8	0.0	0.0	1.2	0.0	4.1	0.7	0.7	0.0	0.0	0.5	0.0	0.0	100.0	6.6	0.5	7.2	153
25-29	92.3	0.9	0.0	1.1	0.7	2.5	2.8	0.0	0.0	0.7	0.0	0.0	0.0	100.0	7.7	0.0	7.7	165
30-34	92.2	4.3	0.0	1.2	0.8	4.7	0.0	0.4	0.0	0.7	0.0	2.2	0.0	100.0	7.8	0.0	7.8	144
35-39	91.1	14.7	0.0	0.0	2.0	6.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	100.0	8.9	0.0	8.9	101
40-44	95.7	10.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4.3	0.0	4.3	95
45-49	(100.0)	(11.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)	52
Number of living children**																		
0	100.0	(0.0)	(0.0)	(0.0)	(0.0).	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	(0.0)	(0.0)	46
1	87.5	0.0	0.0	0.7	0.0	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	100.0	12.5	0.0	12.5	97
2	91.2	0.0	0.0	2.2	1.0	2.7	1.6	0.5	0.0	0.0	0.7	0.0	0.0	100.0	8.1	0.7	8.8	108
3	93.3	5.3	0.0	0.5	1.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	6.7	0.0	6.7	106
4+	94.7	10.3	0.0	0.4	0.4	3.5	0.2	0.3	0.0	0.5	0.0	0.9	0.0	100.0	5.3	0.0	5.3	414
Education																		
None	95.2	8.4	0.0	0.4	0.3	2.9	0.6	0.3	0.0	0.3	0.0	0.0	0.0	100.0	4.8	0.0	4.8	625
Primary	90.4	5.8	0.0	0.9	1.8	5.3	1.5	0.0	0.0	0.0	0.0	0.5	0.0	100.0	9.6	0.0	9.6	121
Secondary +	(62.7)	(4.6)	(0.0)	(7.0)	(0.0)	(23.0)	(4.1)	(0.0)	(0.0)	(0.0)	(3.2)	(0.5)	(0.0)	100.0	(34.1)	(3.2)	(37.3)	25
Wealth index																		
Low	96.9	5.1	0.0	0.3	0.4	1.9	0.0	0.3	0.0	0.2	0.0	1.1	0.0	100.0	3.1	0.0	3.1	420
Medium	95.5	4.9	0.0	0.4	0.0	3.1	0.6	0.4	0.0	0.0	0.0	0.0	0.0	100.0	4.5	0.0	4.5	130
High	85.6	8.0	0.0	1.6	1.2	8.2	2.5	0.0	0.0	0.5	0.4	0.0	0.0	100.0	14.0	0.4	14.4	221
Total	**93.4**	**5.9**	**0.0**	**0.7**	**0.6**	**3.9**	**0.8**	**0.2**	**0.0**	**0.3**	**0.1**	**0.4**	**0.0**	**100.0**	**6.5**	**0.1**	**6.6**	**770**

Note: Male sterilization, female condoms and withdrawal method are used by less than 0.05 per cent and are not shown.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

8.4 Unmet Need

Unmet need for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth or who wish to stop childbearing altogether.[5] Unmet need is identified in MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Women with an unmet need for spacing includes women who are currently married (or in union), fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to space their births. Pregnant women are considered to want to space their births when they state that they did not want the child at the time they got pregnant. Women who are not pregnant are classified in this category if they want to have a child (or another child), but want to have the child at least two years later, or after marriage. Women with an unmet need for limiting are those women who are currently married (or in union), fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to limit their births. The latter group includes women who are currently pregnant but had not wanted the pregnancy at all, and women who are not currently pregnant but do not want to have a child (or another child).

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the MICS data. The percentage of demand for contraception satisfied is defined as the proportion of women currently married or in union who are currently using contraception, out of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception.

Table 8.5 (RH.2) shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied. Total unmet need for contraception is four per cent, i.e. four per cent of married women in Moyale district are not using any contraception and yet they want to stop having children (limit) or postpone the next pregnancy for at least two years (spacing). More women have an unmet need for contraception for spacing (four per cent) compared to a negligible percentage with an unmet need for limiting.

Differentials by wealth index show that the proportion of women with an unmet need is higher among those from high wealth index households (seven per cent) compared to women from low wealth index households, although these estimates are based on few observations.

Overall, 60 per cent of the married or in union women who need contraception are currently using contraceptives.

[5] Unmet need measurement in MICS is somewhat different from that used in other household surveys, such as the Demographic and Health Surveys (DHS). In DHS, more detailed information is collected on postpartum amenorrhoea, and sexual activity. Results from the two types of surveys are strictly not comparable.

Table 8.5 (RH.2): Unmet need for contraception

Percentage of women aged 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, MICS Moyale district, 2008

Characteristics	Current use of contraception	Unmet need for contraception: For spacing**	Unmet need for contraception: For limiting***	Unmet need for contraception: Total ****	Number of women currently married or in union	Percentage of demand for contraception satisfied*****	Number of women currently married or in union with need for contraception
Age							
15-19	(*)	(*)	(*)	(*)	61	(*)	9
20-24	(*)	(*)	(*)	(*)	153	(*)	19
25-29	(*)	(*)	(*)	(*)	165	(*)	20
30-34	(*)	(*)	(*)	(*)	144	(*)	20
35-39	(*)	(*)	(*)	(*)	101	(*)	11
40-44	(*)	(*)	(*)	(*)	95	(*)	6
45-49	(*)	(*)	(*)	(*)	52	(*)	0
Education							
None	4.8	4.1	0.0	4.1	625	53.6	55
Primary	(*)	(*)	(*)	(*)	(*)	(*)	20
Secondary +	(*)	(*)	(*)	(*)	(*)	(*)	9
Wealth index							
Low	(3.1)	(3.0)	(0.0)	(3.0)	420	(50. 7)	26
Medium	(*)	(*)	(*)	(*)		(*)	12
High	(14.4)	(7.3)	(0.0)	(7.3)	221	(66.4)	48
Total	**6.6**	**4.3**	**0.1**	**4.4**	**770**	**59.6**	**85**

** Unmet need for spacing is defined as women who are fecund and not currently using contraception and want to space their births.
*** Unmet need to limit is defined as women who are fecund and not currently using contraception and want to limit their births
***** Proportion of demand satisfied is defined as the proportion of currently married or in union women who are currently using contraception of the total demand for contraception.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases.

8.5 Antenatal Care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs, symptoms and the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider.

The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for

the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content on antenatal care visits, which include:

- Blood pressure measurement
- Urine testing for bateriuria and proteinuria
- Blood testing to detect syphilis and severe anaemia
- Weight/height measurement (optional)

Coverage of antenatal care by skilled personnel (doctor, nurse, or certified midwife) is relatively high in the district with 71 per cent of women receiving antenatal care at least once during pregnancy (Table 8.6(RH.3)). Almost 60 per cent of all women aged between 15-49 years who gave birth in the two years preceding the survey received antenatal care from a nurse or midwife and 11 per cent received it from a medical doctor, while nearly 24 per cent received not antenatal care at all. The proportion of women who received antenatal care (ANC) from a skilled personnel increases with improving levels of the household wealth index as well as woman's educational attainment. For instance, while 94 per cent of women from high wealth index households received antenatal care from skilled personnel, the corresponding figure for women from low wealth index households was only 58 per cent. Similarly, only 66 per cent of women with no education received ANC from a skilled personnel versus 89 per cent for those with primary level education.

Table 8.6 (RH.3): Antenatal care provider

Percentage distribution of women aged 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, MICS Moyale district, 2008

	Person providing antenatal care**							
Characteristics	Medical doctor	Nurse/ midwife	Traditional birth attendant	Other	No antenatal care	Total	Antenatal care by any skilled personnel *	Number of women who gave birth in the preceding two years
Age								
15-19	(8.3)	(62.9)	(7.1)	(0.0)	(21.7)	(100.0)	(71.2)	41
20-24	10.1	61.6	6.8	0.0	21.5	100.0	71.7	107
25-29	12.4	58.4	2.5	0.0	26.8	100.0	70.7	111
30-34	8.0	65.9	7.7	3.4	15.0	100.0	73.9	85
35-49	(13.0)	(51.8)	(2.0)	(0.0)	(33.2)	(100.0)	(64.8)	78
Education								
None	10.5	55.4	5.2	0.5	28.4	100.0	65.9	336
Primary	11.8	76.9	3.9	1.4	6.0	100.0	88.7	75
Secondary +	(*)	(*)	(*)	(*)	(*)	(*)	(*)	12
Wealth index								
Low	9.2	48.6	5.8	0.9	35.6	100.0	57.7	237
Medium	12.2	64.6	7.3	0.9	15.1	100.0	76.8	75
High	12.8	81.1	1.8	0.0	4.3	100.0	93.9	111
Total	**10.6**	**59.9**	**5.0**	**0.7**	**23.8**	**100.0**	**70.6**	**423**

* Skilled health personnel include doctors, nurses, midwives, and auxiliary midwives.
** If the respondent mentioned more than one provider, only the most qualified provider is considered
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Table 8.7 (RH.4) provides insights into the content of antenatal care services offered to women in Moyale during pregnancy. The table shows that about 76 per cent of the women received ANC at least once during their pregnancy. As noted earlier, this proportion increases with improvements in woman's education attainment as well as improvements in the household wealth index rankings. Among women who received ANC, 65 per cent reported that their blood test was taken, 64 per cent had blood pressure measurements taken, 63 per cent gave urine specimen, and 67 per cent had their weights measured. As expected, the proportion of women receiving all the above checks increased with increasing levels of the woman's educational attainment as well as by household wealth index. For example, on average 93 per cent of women from high wealth index household received all 4 checks (blood pressure, blood test, urine specimen and weight measurements) during their ANC visits compared to an average of about 48 per cent among those from low wealth index households.

Table 8.7 (RH.4): Antenatal care content

Percentage of pregnant women receiving antenatal care among women aged between 15-49 years who gave birth in two years preceding the survey and percentage of pregnant women receiving specific care as part of the antenatal care received, MICS Moyale district, 2008

Characteristics	Percentage of pregnant women receiving ANC one or more times during pregnancy	Percentage of pregnant women who had:				Number of women who gave birth in two years preceding survey
		Blood test taken*	Blood pressure measured*	Urine specimen taken*	Weight measured*	
Age						
15-19	(78.3)	(72.0)	(68.1)	(70.7)	(71.7)	41
20-24	78.5	65.5	62.7	63.4	68.1	107
25-29	73.2	68.0	65.7	66.1	67.5	111
30-34	85.0	64.7	66.1	62.5	70.9	85
35-49	66.8	56.3	56.3	56.3	56.1	78
Education						
None	71.6	58.8	57.7	57.4	61.2	336
Primary	94.0	88.7	85.9	85.9	87.7	75
Secondary +	(*)	(*)	(*)	(*)	(*)	12
Wealth index						
Low	64.4	49.7	47.7	47.3	51.8	237
Medium	84.9	72.4	72.3	70.8	75.4	75
High	95.7	92.5	91.5	92.5	92.5	111
Total	**76.2**	**64.9**	**63.5**	**63.3**	**66.6**	**423**

Proportions are calculated separately: Total number of women weighed, blood pressure measured, gave urine sample, and gave blood sample.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

8.6 Assistance at Delivery

Three quarters of all maternal deaths occur during delivery and the immediate post-partum period. The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of an emergency. A World Fit for Children goal is to ensure that women have ready and affordable access to skilled attendance at delivery. The indicators are the proportion of births with a skilled attendant and proportion of institutional deliveries. The skilled attendant at delivery indicator is also used to track progress towards the achievement of MDG goal five that seeks to reduce maternal mortality ratio by three quarters between 1990 and 2015.

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. *A skilled attendant* includes a doctor, nurse, midwife or auxiliary midwife. From Table 8.8(RH.5), 36 per cent of births occurring in the two years prior to the Moyale district MICS 2008 were delivered with the assistance of a skilled personnel, with one in every four deliveries taking place at a health facility. A significant proportion of the skilled personnel assistance came from nurses and midwives who assisted with the delivery of nearly a third of all births (32 per cent). More than half of births (62 per cent) in the two years prior to the survey were delivered with the assistance of a traditional birth attendant.

The more educated a woman is, the higher the likelihood of her delivering with the assistance of a skilled attendant. For instance, the proportion of women aged 15-49 years who gave birth in the two years preceding the survey with the assistance of skilled personnel is 31 per cent for women with no education, compared to 51 per cent among those with primary level education. As expected, more education for women also increased the likelihood of delivering in health facility.

Better educational attained not only improves the proportion of women receiving skilled delivery assistance, but also increases the chances of delivering in a health facility. For example, while 21 per cent of women with no education delivered in a health facility, the corresponding figure was 39 per cent among those with primary level education. A similar pattern is observed with household wealth index. About 6 per cent of women from low wealth index households delivered in a health facility versus 67 per cent among those from high wealth index households. It is also notable that young women were more likely to deliver their births in a health facility compared to women in the middle age group (30-39 years) and above.

Table 8.8 (RH.5): Assistance during delivery

Percentage distribution of women aged 15-49 with a birth in two years preceding the survey by type of personnel assisting at delivery, MICS Moyale district, 2008

	Person assisting at delivery										
Characteristics	Medical doctor	Nurse/ midwife	Traditional birth attendant	Community health worker	Relative /friend	Other	No attendant	Total	Any skilled personnel *	Delivered in health facility	Number of women who gave birth in preceding two years
Age											
15-19	(4.5)	(43.4)	(52.1)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(47.9)	(42.5)	41
20-24	2.4	41.7	55.5	0.0	0.0	0.5	0.5	100.0	44.0	31.0	107
25-29	4.3	26.4	66.5	0.0	0.0	2.8	2.8	100.0	30.6	21.8	111
30-34	4.1	31.5	61.8	0.0	1.2	1.4	1.4	100.0	35.5	21.9	85
35-49	6.9	20.9	67.9	0.8	0.0	4.2	3.5	100.0	27.8	18.9	78
Education											
None	3.7	27.4	66.3	0.2	0.3	2.1	2.1	100.0	31.1	20.7	336
Primary	5.1	45.7	48.4	0.0	0.0	0.8	0.8	100.0	50.9	39.2	75
Secondary +	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	12
Wealth index											
Low	1.5	17.4	78.3	0.0	0.4	2.4	2.5	100.0	18.9	5.9	237
Medium	6.6	31.7	59.3	0.8	0.0	1.5	1.5	100.0	38.3	26.5	75
High	8.7	63.3	27.5	0.0	0.0	0.6	0.6	100.0	71.9	67.3	111
Total	**4.3**	**31.9**	**61.6**	**0.1**	**0.2**	**1.9**	**1.8**	**100.0**	**36.2**	**25.6**	**423**

Skilled health personnel include doctors, nurses, midwives, and auxiliary midwives.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

9.1 Child Learning

It is well recognized that a period of rapid brain development occurs in the initial three to four years of life, with the quality of home care being the major determinant of the child's development during this period. In this context, adult activities with children, presence of books in the home for the child and the conditions of care are important indicators of quality of home care. A World Fit for Children goal is that "children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn".

Information on a number of activities that support early learning was collected in the Moyale district MICS survey. This included the involvement of adults with children in the following activities: reading books or looking at picture books; telling stories; singing songs; taking children outside the home, compound or yard; playing with children; and spending time with children, naming, counting, or drawing things.

In the Moyale study, close to two out of five children aged under-five (37 per cent), a household member engaged in at least four activities that promote learning and school readiness (Table 9.1 (CD.1)). Engagement in at least four activities that promote learning and school readiness among children was somewhat comparable for both males (39 per cent) and females (36 per cent), but increased with increasing levels of household wealth index, mother's education, and to a certain extent by father's educational attainment.

The average number of activities that adults engaged with children was about three, and this average was comparable by gender of child, education of the mother/father, household wealth index but not for child's age. Besides household member's involvement, the MICS survey sought to examine the separate involvement of fathers in children's activities. On average fathers involvement with children in activities that promote learning and school readiness was about 21 per cent. Father's level of involvement increased with increasing levels of mother's education, father's education, and household wealth index. On average, father's involvement was limited to far less than one activity (mean of 0.3), meaning that much of the interaction with children from household members was from other household members. This is also well supported by the finding that on average, 14 per cent of children lived in a household without their natural father.

Table 9.1 (CD.1): Family support for learning

Percentages of children aged 0-59 months for whom household members are engaged in activities that promote learning and school readiness, MICS Moyale district, 2008

	Percentages of children aged 0-59 months					
Characteristics	For whom household members engaged in four or more activities that promote learning and school readiness*	Mean number of activities household members engage in with the child	For whom the father engaged in one or more activities that promote learning and school readiness**	Mean number of activities the father engaged in with the child	Living in a household without their natural father	Number of children aged 0-59 months
Sex						
Male	38.7	3.0	21.4	0.3	15.7	587
Female	35.9	2.9	19.4	0.3	12.5	532
Age						
0-23 months	9.9	1.6	7.6	0.1	10.4	447
24-59 months	55.6	3.8	29.0	0.4	16.7	672
Mother's education						
None	36.1	2.9	18.8	0.3	14.5	906
Primary	40.6	3.1	27.5	0.4	12.3	173
Secondary +	(51.8)	(3.3)	(28.5)	(0.6)	(16.2)	40
Father's education						
None	33.0	2.7	21.1	0.3	Na	667
Primary	43.4	3.2	20.0	0.3	Na	196
Secondary +	42.4	3.0	29.3	0.4	Na	97
Father not in HH	45.4	3.4	12.7	0.1	100.0	159
Wealth index						
Low	33.7	2.8	16.8	0.2	14.3	615
Medium	35.6	2.9	19.6	0.3	12.4	193
High	45.8	3.2	28.2	0.4	15.0	311
Total	**37.4**	**2.9**	**20.5**	**0.3**	**14.2**	**1119**

* Any adult has engaged in 4 or more activities to promote learning and school readiness in the past 3 days.
** Father has provided one or more activities to promote learning and school readiness.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

10.1 Pre-School Attendance and School Readiness

Attendance to pre-school education in an organized learning or child education program is important for the readiness of children for school. One of the World Fit for Children goals is the promotion of early childhood education.

In Moyale district, 23 per cent of children aged between 36-59 months are attending pre-school (Table 10.1 (ED.1). The survey also reveals that slightly more female children (25 per cent) are attending early childhood education compared to male children (21 per cent). The proportion of children attending pre-school at ages 48-59 months (33per cent) is nearly triple the proportion attending at ages 36-47 months (13 per cent), indicating that children in Moyale are more likely to attend early childhood education after they reach four years of age. The findings additionally show that early childhood education attendance does not vary much by household wealth index, but appears to be higher among children with mothers educated to primary or higher levels.

Table 10.1 (ED.1): Early childhood education

Percentages of children aged 36-59 months who are attending some form of organized early childhood education programme and percentages of first graders who attended pre-school, MICS Moyale district, 2008

Characteristics	Percentages of children aged 36-59 months currently attending early childhood education	Number of children aged 36-59 months	Percentages of children attending first grade who attended preschool program in previous year	Number of children attending first grade
Sex				
Male	20.6	219	(80.6)	31
Female	25.2	213	(79.1)	29
Age of child				
36-47 months	12.9	220	0.0	0
48-59 months	33.2	212	0.0	0
6 years*	0.0	0	(79.9)	60
Mother's education				
None	21.5	355	(*)	51
Primary	28.6	65	(*)	8
Secondary +	25.6	12	(*)	1
Wealth index				
Low	24.5	249	(86.2)	36
Medium	21.9	64	(*)	13
High	20.0	119	(*)	11
Total	**22.9**	**432**	**79.9**	**60**

* Primary school entry age should be defined at the country level (usually based on UNESCO's ISCED1 classification). Here, it is assumed that primary education starts at age 6.
(*) Based on 0-25 un-weighted figures and has been suppressed.
( ) Based on 25-50 un-weighted figures.

Table 10.1 (ED. 1) also shows the proportion of children in standard one of primary school who attended pre-school the previous year. This is an important indicator of primary school readiness among the standard one cohort. Overall, 80 per cent of children who are currently

attending the first grade of primary school were attending pre-school the previous year. This proportion of children is very comparable by child gender (males 81 per cent versus 79 per cent for female children).

10.2 Primary and Secondary School Participation

Universal access to basic education and the achievement of primary education by the world's children is one of the most important objectives of the Millennium Development Goals and A World Fit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

The indicators for primary and secondary school attendance include:

- Net intake rate in primary education
- Net primary school attendance rate
- Net secondary school attendance rate
- Net primary school attendance rate of children of secondary school age

Female to male education ratio (or gender parity index - GPI)

- The indicators of school progression include:
- Survival rate to grade five
- Transition rate to secondary school
- Net primary completion rate

Among children who are of primary school entry age (age six) in Moyale district, only one in three (34 per cent) are attending standard one of primary school. This proportion is marginally higher among female children (35 per cent) compared to male children (33 per cent). The proportion of children of primary school entry age currently attending grade one increases with improvements in mother's education, partially by increasing levels of household wealth index.

Table 10.2 (ED.2): Primary school entry

Percentages of children of primary school entry age (six years old) attending standard one, MICS Moyale district, 2008

Characteristics	Percentages of children of primary school entry age currently attending grade 1	Number of children of primary school entry age
Sex		
Male	33.2	131
Female	34.5	118
Mother's education		
None	33.5	218
Primary	39.5	26
Secondary +	(*)	5
Wealth index		
Low	31.3	152
Medium	(39.2)	45
High	36.7	52
Total	**33.9**	**249**

(*) Based on 0-25 un-weighted figures and has been suppressed.
( ) Based on 25-50 un-weighted figures.

Table 10.3 (ED.3) provides the percentages of children of primary school age attending primary or secondary school. Seventy four per cent of children of primary school age in Moyale district are attending school. The net attendance ratio for males at 75 per cent and for females at 72 per cent appear comparable. As expected, children of primary school age (6 – 13 years) who have mothers that are more educated are more likely to be attending primary or secondary school

Table 10.3 (ED.3): Primary school net attendance ratio

Percentage of children of primary school age (6 – 13 years) attending primary or secondary school (NAR), MICS Moyale district, 2008

	Net attendance ratio*			Number of children		
Characteristics	Male	Female	Total	Male	Female	Total
Age						
6	37.3	39.5	38.3	131	118	249
7	56.5	72.4	65.0	90	104	195
8	78.7	73.4	76.3	151	125	276
9	86.1	78.5	82.1	74	82	156
10	90.3	82.2	86.6	134	116	249
11	90.9	83.2	87.2	65	60	125
12	87.3	78.4	83.4	136	106	241
13	82.0	78.8	80.5	105	92	198
Mother's education						
None	73.8	70.3	72.1	764	694	1458
Primary	84.3	83.6	83.9	102	95	196
Secondary +	(86.9)	(82.7)	(85.1)	20	15	35
Wealth index						
Low	69.6	61.7	65.8	492	454	946
Medium	83.3	86.8	85.0	166	156	321
High	81.9	84.6	83.1	228	194	422
Total	**75.3**	**72.1**	**73.8**	**886**	**804**	**1690**

* The primary school net attendance ratio (NAR) is the percentage of children of primary school age that are attending primary or secondary school. Children of primary school age (6-13 years) currently attending primary or secondary school are included in the numerator. All children of primary school age are included in the denominator.
( ) Based on 25-50 un-weighted figures.

The secondary school net attendance ratio is presented in Table 10.4 (ED.4). Only 12 per cent of the children of secondary school age (14 - 17 years) are attending secondary school. The remaining 88 per cent are either out of school or attending primary school. Unlike for the early childhood education and primary school attendance, gender differentials in secondary school attendance appear to be in favour of males (14 per cent) versus only nine per cent for females. As expected, the better the socio-economic status of the household, the higher the proportion of secondary school age children attending school.

Table 10.4 (ED.4): Secondary school net attendance ratio

Percentage of children of secondary school age (14 – 17 years) attending secondary school or higher (NAR), MICS Moyale district, 2008

	Net attendance ratio			Number of children		
Characteristics	Male	Female	Total	Male	Female	Total
Age						
14	2.1	2.5	2.4	77	140	218
15	11.5	14.3	12.6	120	71	191
16	16.3	13.5	15.3	89	54	143
17	25.8	19.0	23.5	73	37	110
Mother's education						
None	13.9	7.0	10.8	279	230	509
Primary	15.0	35.4	25.4	24	25	49
Secondary +	0.0	0.0	0.0	5	7	11
Mother not in HH	12.4	7.4	10.2	52	40	92
Wealth index						
Low	9.8	4.6	7.6	213	157	370
Medium	12.8	12.5	12.6	60	73	132
High	23.5	16.2	20.2	87	72	159
Total	**13.6**	**9.3**	**11.6**	**359**	**302**	**661**

* The secondary school net attendance ratio (NAR) is the percentage of children of secondary school age that are attending secondary school or higher. Children of secondary school age currently attending secondary school or higher are included in the numerator. All children of secondary school age are included in the denominator.

The primary school net attendance ratio of children of secondary school age is presented in Table 10.5 (ED.4W). Forty four per cent of children of secondary school age are attending primary school when they should be attending secondary school. Since only 12 per cent of them were attending secondary school (Table 10.3), it is clear that the remaining 44 per cent are not attending school at all. As expected, children aged 14 and 15 years are more likely to be still in primary school while they should be in secondary schools compared to their older colleagues. Data on differentials by household wealth index show that this problem is more common among low wealth index households (44 per cent) versus 41 and 39 per cent among high and medium wealth index households.

Table 10.5 (ED.4w): Secondary school age children attending primary school

Percentages of children of secondary school age (14 – 17 years) attending primary school, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage attending primary school			Number of children		
	Male	Female	Total	Male	Female	Total
Age						
14	49.8	40.7	44.0	77	140	218
15	27.0	17.9	23.6	120	71	191
16	13.9	17.1	15.1	89	54	143
17	11.9	(4.8)	9.5	73	37	110
Mother's education						
None	26.5	29.9	28.2	279	230	509
Primary	(*)	(13.3)	47.9	24	25	49
Secondary +	(*)	(*)	45.3	5	7	11
Mother not in HH	21.5	(19.1)	20.4	52	40	92
Wealth index						
Low	28.3	29.3	43.5	213	157	370
Medium	24.1	21.2	38.9	60	73	132
High	20.0	26.7	40.8	87	72	159
Total	**25.6**	**26.7**	**43.5**	**359**	**302**	**661**

* Children of secondary school age currently attending primary school are included in the numerator. All children of secondary school age are included in the denominator.
(*) Based on 0-25 un-weighted figures and has been suppressed.
( ) Based on 25-50 un-weighted figures.

The ratio of girls to boys attending primary and secondary education is provided in Table 10.6 (ED.7). These ratios are better known as the Gender Parity Index (GPI). Notice that the ratios included here are obtained from net attendance ratios rather than gross attendance ratios.[6] The latter ratio provides an erroneous description of the GPI mainly because in most cases, the majority of over-aged children attending primary education tend to be boys. The table shows that gender parity for primary school is 0.96, meaning there are 96 girls for every 100 boys, reflecting a negligible bias in primary school attendance. The gender parity is also consistent by levels of mother's education and generally comparable by increasing levels of the household wealth index. However, the Gender Parity Index drops to 0.68 for secondary education, reflecting a wider disparity between boys and girls in accessing secondary school. The Gender Parity Index for secondary education is lowest among those from low wealth index households (0.47) and surprisingly higher among those from medium wealth index households (0.97).

[6] 'Net' attendance refers only to those children of the secondary school age cohort, while 'gross' refers to all children in school regardless of their ages.

Table 10.6 (ED.7): Education gender parity

Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education, MICS Moyale district, Eastern Province, 2008

Characteristics	Primary school net attendance ratio (NAR)		Gender parity index (GPI) for primary school NAR*	Secondary school net attendance ratio (NAR)		Gender parity index (GPI) for secondary school NAR*
	Girls	Boys		Girls	Boys	
Sex						
Male	NA	75.3	NA	NA	13.6	NA
Female	72.2	NA	NA	9.3	NA	NA
Mother's education						
None	70.4	73.8	0.95	7.0	13.9	0.51
Primary	83.6	84.3	0.99	35.4	15.0	2.36
Secondary +	82.7	86.9	0.95	0.0	0.0	0.0
Wealth index						
Low	61.9	69.6	0.89	4.6	9.8	0.47
Medium	86.8	83.3	1.04	12.5	12.8	0.97
High	84.6	81.9	1.03	16.2	23.5	0.69
Total	**72.2**	**75.3**	**0.96**	**9.3**	**13.6**	**0.68**

* The gender parity index (GPI) is the ratio of female to male net attendance ratios (primary or secondary). The primary and secondary net attendance ratios are presented in tables ED.3 and ED.4.

10.3 Adult Literacy

One of the World Fit for Children goals is to ensure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. In MICS, since only a women's questionnaire was administered, the results are based only on females aged 15-24 years. Literacy was assessed on the ability of women to read a short simple statement or on school attendance. The percentage of females aged 15-24 year who are literacy is presented in Table 10.7 (ED.8).

Overall, only 28 per cent of women aged between 15-24 years are literate in Moyale district. Literacy varies considerably between age and socio-economic characteristics of the household. The proportion of women who are literate is higher among the younger age group 15-19 years (34 per cent) in contrast to the 20-24 years old age group (23 per cent). As expected, the level of literacy increases with increasing levels of the household wealth index.

Table 10.7 (ED.8): Adult literacy

Percentages of women aged 15-24 years that are literate*,MICS Moyale District, Eastern Province, Kenya 2008

Characteristics	Percentages literate*	Percentages not known**	Number of women aged 15-24 years
Education			
None	2.6	0.0	233
Primary	51.8	0.9	136
Secondary +	(100.0)	(*)	39
Age			
15-19	33.7	0.3	204
20-24	23.0	0.3	204
Wealth index			
Low	18.0	0.0	220
Medium	36.5	0.0	73
High	42.9	1.1	114
Total	**28.3**	**0.3**	**408**

* Percentages of women aged 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education.
** The percentages not known include those for whom no sentence in the required language was available or for whom no response was reported. If the percentage of the population for whom literacy status is not known exceeds 10 per cent in any category, caution should be exercised in the interpretation of the results.
(*) Based on 0-25 un-weighted figures and has been suppressed.
( ) Based on 25-50 un-weighted figures.

11.1 Birth Registration

The Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. The World Fit for Children has the objective of developing systems to ensure the registration of every child at or shortly after birth, to fulfil his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The indicator is the percentages of children below five years of age whose birth is registered.

Only 34 per cent of children below five years in Moyale district have had their births registered (Table 11.1 (CP.1)). There are no significant variations in birth registration by sex of the child. However, the proportion of registered births increases with improving levels of the mother's education as well as by increasing levels of the household wealth index. For example, only 32 per cent of births from mothers with no education are registered compared to 40 per cent and 57 per cent for mothers with primary education and secondary education or higher respectively. Similarly 28 per cent of births to mothers from low wealth index households are registered compared to 40 per cent and 42 per cent of births to mothers from medium and high wealth index households.

Asked to identify reasons for not registering their children's births, 32 per cent of the respondents highlighted the distance to the registration centre, while 28 per cent declared ignorance of the need for registration. The proportion of women sighting the above two reasons for not registering the births declined with increasing levels of the household wealth index.

Table 11.1 (CP.1): Birth registration

Percentage distribution of children aged 0-59 months by whether birth is registered and reasons for non-registration, MICS Moyale district, 2008

Characteristics	Birth is Registered	Number of children aged 0-59 months	Birth is not registered because: Costs too much	Must travel too far	Didn't know child should be registered	Late, did not want to pay fine	Doesn't know where to register	Other	Don't know	Total	Number of children aged 0-59 months without birth registration
Sex											
Male	34.7	587	6.7	30.5	29.1	1.6	5.2	23.5	3.3	100.0	283
Female	33.3	532	7.2	33.6	26.5	0.4	6.4	20.6	4.1	100.0	266
Age											
0-11 months	29.1	208	3.7	27.2	18.5	0.5	5.3	40.8	3.0	100.0	134
12-23 months	30.4	233	8.3	33.7	24.7	0.9	8.4	18.1	3.9	100.0	128
24-35 months	38.7	234	7.7	26.9	36.3	1.3	7.2	16.6	4.0	100.0	100
36-47 months	36.2	224	11.4	40.1	30.1	1.1	4.0	11.4	1.8	100.0	96
48-59 months	35.5	221	1.5	33.8	34.0	1.6	5.5	17.8	5.8	100.0	92
Mother's education											
None	32.0	906	7.4	31.6	26.9	1.2	6.7	22.1	4.0	100.0	470
Primary	39.7	173	3.1	37.2	34.2	0.0	5.2	18.6	1.6	100.0	74
Secondary +	(56.7)	(40)	(14.5)	(0.0)	(18.7)	(0.0)	(0.0)	(66.8)	0.0	100.0	6
Wealth index											
Low	28.0	615	6.1	36.8	29.5	1.4	7.3	14.9	4.0	100.0	363
Medium	40.0	193	14.7	23.9	26.5	0.0	4.7	26.4	3.8	100.0	92
High	42.3	311	2.5	21.6	22.8	0.7	4.7	45.5	2.2	100.0	95
Total	**34.1**	**1,119**	**6.9**	**32.1**	**27.8**	**1.0**	**6.4**	**22.1**	**3.7**	**100.0**	**550**

(*): Not shown, based on less than 25 un-weighted cases.
( ): Not shown, based on 25-50 un-weighted cases

11.2 Child Labour

Article 32 of the Convention on the Rights of the Child states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development..." The World Fit for Children mentions nine strategies to combat child labour while the MDGs call for the protection of children against exploitation. In the MICS questionnaire, a number of questions addressed the issue of child labour, that is, children 5-14 years of age involved in labour activities. A child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey the child performed:

Ages 5-11: at least one hour of economic work or 28 hours of domestic work per week
Ages 12-14: at least 14 hours of economic work or 28 hours of domestic work per week

This definition allows differentiation between child labour and child work to identify the type of work that should be eliminated. As such, the estimate provided here is a minimum of the prevalence of child labour since some children may be involved in hazardous labour activities for a number of hours that could be less than the numbers specified in the criteria explained above. Table

11.2 (CP.2) presents the results of child labour by type of work done. Percentages do not add up to one hundred as some children may be involved in more than one type of work.

Looking at all types of work of children aged between 5-14 years in Moyale district; the prevalence of child labour is quite low and more prevalent among female children.

Table 11.2 (CP.2): Child labour

Percentages of children aged 5-14 years who are involved in child labour activities by type of work, MICS Moyale district, 2008

Characteristics	Working outside household		Household chores for 28+ hours/ week	Working for family business	Total child labour*	Number of children aged 5-14 years
	Paid work	Unpaid work				
Sex						
Male	0.0	0.9	1.0	1.5	2.8	1,097
Female	0.3	0.6	2.0	1.8	4.0	1,083
Age						
5-11 years	0.0	1.1	1.2	1.9	3.4	1,523
12-14 years	0.5	0.0	2.3	1.1	3.4	657
School participation						
Yes	0.0	0.6	0.5	1.4	2.3	1,705
No	0.6	1.2	5.0	2.8	7.4	475
Mother's education						
None	0.2	0.7	1.6	1.8	3.6	1,873
Primary	0.0	0.9	0.5	1.0	2.1	260
Secondary +	(0.0)	(0.0)	(4.8)	(0.0)	(4.8)	47
Wealth index						
Low	0.1	0.6	2.4	2.4	4.4	1,210
Medium	0.0	1.3	0.7	1.2	3.2	424
High	0.3	0.7	0.1	0.4	1.3	546
Total	**0.1**	**0.7**	**1.5**	**1.7**	**3.4**	**2,180**

The table is based on the responses to a series of questions in the child labour module which is administered to the mother/caretaker of each child in the household 5-14 years of age. The numerator to estimate the child labour percentages includes: (a) children 5-11 years of age that during the week preceding the survey did at least one hour of economic activity or at least 28 hours of domestic chores, and (b) children 12-14 years of age that during the week preceding the survey did at least 14 hours of economic activity or at least 28 hours of domestic chores.
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Table 11.3 (CP.3) presents the percentage of children classified as either student labourers or labourer students. Student labourers are the children attending school that were involved in child labour activities at the time of the surveys. Among the 78 per cent of the children aged 5-14 years attending school, a negligible per cent are also involved in child labour activities. On the other hand, 53 per cent of the children classified as child labourers, are attending school. The rate of male child labourers also attending school is greater at 63 per cent than that of their female counterparts (46 per cent).

Table 11.3 (CP.3): Labourer students and student labourers

Percentages of children aged between 5-14 years who are labourer students and student labourers, Moyale district, 2008

Characteristics	Percentages of children in child labour*	Percentages of children attending school	Number of children 5-14 years of age	Percentages of child labourers who are also attending school	Number of child labourers aged 5-14	Percentages of students who are also involved in child labour****	Number of students aged 5-14
Sex							
Male	2.8	80.4	1,097	63.1	31	2.2	882
Female	4.0	76.0	1,083	45.8	44	2.4	823
Age							
5-9 years	3.4	77.2	1,523	58.4	52	2.6	1,176
10-14 years	3.4	80.5	657	40.2	22	1.7	529
Mother's education							
None	3.6	76.1	1,873	49.1	67	2.3	1,426
Primary	2.1	91.3	260	81.4	5	1.8	237
Secondary +	(4.8)	(88.5)	47	(100.0)	2	(5.4)	42
Wealth index							
Low	4.4	71.0	1,210	49.2	54	3.1	859
Medium	3.2	89.3	424	70.2	13	2.5	378
High	1.3	85.5	546	49.3	7	0.8	467
Total	**3.4**	**78.2**	**2,180**	**53.0**	**74**	**2.3**	**1,705**

* The table is based on the responses to a series of questions in the child labour module which is administered to the caretaker of each child in the household 5-14 years of age. The numerator to estimate the child labour percentages includes: (a) children 5-11 years of age that during the week preceding the survey did at least one hour of economic activity or at least 28 hours of domestic chores, and (b) children 12-14 years of age that during the week preceding the survey did at least 14 hours of economic activity or at least 28 hours of domestic chores.

** Labourer students: Number of children 5-14 years of age involved in child labour activities that are also attending school divided by the total number of children 5-14 years of age involved in child labour activities.

**** Student labourers: Number of children 5-14 years of age attending school that are also involved in child labour activities divided by the total number of children 5-14 attending school.

(*) Based on less than 25 un-weighted cases.

( ) Based on 25-50 un-weighted cases

11.3 Child Discipline

As stated in A World Fit for Children, "children must be protected against any acts of violence …" and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. In the Moyale district MICS survey, mothers/caretakers of children aged 2-14 years were asked a series of questions on the ways parents discipline their children when they misbehave. Note that for the child discipline module, one child aged between 2-14 years per household was selected randomly during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the share of children between 2-14 years that experience psychological aggression as punishment, or minor physical punishment, or severe physical punishment; and 2) the share of parents/caretakers of children between 2-14 years of age that believe that in order to raise their children properly, they need to physically punish them.

Table 11.4 (CP.4) indicates that 76 per cent of children aged between 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members. Two in every five children (40 per cent) were subjected to psychological punishment and 13 per cent of children were subjected to severe physical punishment. About 42 per cent of mothers/caretakers believe that children should be physically punished, which probably translated to the high proportion of physical punishment (68 per cent for minor physical and 13 per cent for severe physical). Mother's belief in any psychological or physical punishments was lowest among those educated up to secondary level or higher and for those from high wealth index households.

Table 11.4 (CP.4): Child discipline

Percentages of children aged 2-14 years according to method of disciplining the child, Moyale district, 2008

	Percentages of children 2-14 years of age who experience:								
		Type of punishment							
Characteristics	Only non-violent discipline	Psycho-logical	Minor physical	Severe physical	Any psychological or physical	No discipline or punishment	Missing	Mother/ caretaker believes that the child needs to be physically punished	Number of children aged 2-14 years**
Sex									
Male	23.4	36.9	66.6	14.8	73.7	2.9	0.0	43.0	1340
Female	19.5	42.9	68.4	12.1	77.4	3.0	0.1	42.3	1390
Age									
2-4 years	26.0	29.5	58.4	9.1	65.2	8.6	0.3	36.0	582
5-9 years	17.4	45.1	71.9	13.9	80.8	1.8	0.0	52.0	1126
10-14 years	23.3	40.2	68.0	15.3	75.7	1.0	0.0	36.2	1022
Mother's education									
None	20.9	40.1	67.6	13.8	75.9	3.1	0.1	42.2	2314
Primary	23.8	41.0	66.8	11.3	74.2	2.0	0.0	48.6	355
Secondary +	28.1	26.7	69.9	10.7	69.9	2.0	0.0	25.8	61
Wealth index									
Low	20.7	34.9	68.0	11.9	75.1	4.2	0.0	44.3	1507
Medium	27.6	45.7	63.9	14.5	70.8	1.2	0.3	46.7	517
High	18.4	46.4	69.2	15.9	80.0	1.6	0.0	36.2	707
Total	**21.4**	**39.9**	**67.5**	**13.4**	**75.6**	**2.9**	**0.1**	**42.6**	**2730**

** Table is based on children aged 2-14 years randomly selected during fieldwork (one child selected per household, if any children in the age range) for whom the questions on child discipline were administered.

11.4 Early Marriage

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 60 million women aged between 20-24 years were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

In many parts of the world parents encourage the marriage of their daughters while they are still children in hope that the marriage will benefit them both financially and socially, while also relieving the financial burdens of the family. In actual fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to 'free and full' consent to a marriage is recognized in the Universal Declaration of Human Rights - with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. The Convention on the Elimination of all Forms of Discrimination against Women mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage..." While marriage is not considered directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to express their views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices - and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage are the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages and the African Charter on the Rights and Welfare of the Child and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa. Child marriage was also identified by the Pan-African Forum against the Sexual Exploitation of Children as a type of commercial sexual exploitation of children.

Young married girls are a unique, though often invisible, group. Required to perform heavy amounts of domestic work, often under pressure to demonstrate fertility, and responsible for raising children while still young. Married girls and child mothers face constrained decision-making and reduced life choices. Boys are also affected by child marriage but the issue impacts girls in far larger numbers and with more consequences than for boys. Cohabitation - where a couple lives together as if married - raises the same human rights concerns as marriage. Where a girl lives with a man and takes on the role of caregiver for him, the assumption is often that she has become an adult woman, even if she has not yet reached the age of 18. Additional concerns due to the informality of the relationship - for example, inheritance, citizenship and social recognition might make girls in informal unions vulnerable in different ways than those who are in formally recognized marriages.

Research suggests that many factors interact to place a child at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of becoming married while still a child. Women who married at younger ages were more likely to believe that it is sometimes acceptable for a husband to beat his wife and were more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood.

Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before the age of 18 tend to have more children than those who marry later in life. Pregnancy related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19 years, particularly among the youngest of this cohort. There is evidence to suggest that girls who marry at young ages are more likely to marry older men which puts them at increased risk of HIV infection. Parents seek to marry off their girls to protect their honour, and men often seek younger women as wives as a means to avoid

choosing a wife who might already be infected. The demand for this young wife to reproduce and the power imbalance resulting from the age differential leads to very low condom use among such couples.

Table 11.5 (CP.5) presents the percentages of women aged between 15-49 years married before 15 years of age, percentages of women age 20-49 years married before age 18years, and the percentages of women aged 15-19 years married or in union. The table shows that in Moyale district, 16 per cent of women aged between 15-49 years currently in marriage or union were married before age 15, while 57 per cent of women aged between 20-49 married before age 18. The highest proportion of women who married before ages 15 and 18 years were in the 35-39 years age group. Among those adolescent girls aged between 15-19 years, 30 per cent are currently married or in union, this means nearly one in three women aged between 15-19 years old in Moyale are living with a partner.

Lower levels of education are highly positively associated with getting married at a younger age. Among married or in union women aged between 15-49 years, 19 per cent of those with no education married before age 15 years and 61 per cent of those with no education in the age bracket 20-49 years married before the age of 18 years. This contrasts sharply with the situation for women with secondary or higher education. The influence of wealth status of the house hold on early marriage is not very clear although a bias towards early marriage for women in lower wealth status households is observed.

Table 11.5 (CP.5): Early marriage

Percentages of women aged 15-49 years in marriage or union before their 15th birthday, percentages of women aged 20-49 years in marriage or union before their 18th birthday, and percentages of women aged 15-19 years currently married or in union, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentages married before age 15*	Number of women aged 15-49 years	Percentages married before age 18*	Number of women aged 20-49 years	Percentages of women 15-19 married/in union**	Number of women aged 15-19 years
Age						
15-19	9.9	204	NA	NA	30.1	204
20-24	17.2	204	51.0	204	NA	NA
25-29	13.3	191	54.1	191	NA	NA
30-34	19.5	158	64.3	158	NA	NA
35-39	24.8	111	66.5	111	NA	NA
40-45	16.8	103	50.4	103	NA	NA
45-49	(7.3)	60	(54.4)	60	NA	NA
Education						
None	18.5	747	61.0	650	49.2	98
Primary	9.9	220	50.8	128	14.4	92
Secondary +	1.2	64	(12.0)	49	0.0	14
Wealth index						
Low	17.0	550	62.2	435	31.5	115
Medium	17.2	185	57.0	147	22.9	39
High	11.8	296	46.3	246	32.4	49
Total	**15.6**	**1031**	**56.5**	**827**	**30.1**	**204**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Spousal age difference is an indicator calculated as the percentages of married/in union women with a difference of 10 or more years younger than their current spouse. Table 11.6 (CP.6) presents the results of the age difference between husbands and wives. The results show that about two in five women aged 15-19 years (42 per cent) are currently married to a man who is older by ten years or more, and an almost equal proportion of women in this age group (41 per cent) are married to spouses who are 5-9 years older. A similar trend is observed for women in aged 20 -24 years, with 44 per cent and 39 per cent having spouses who are 10+ and 5-9 years older, respectively. Overall, 43 per cent of the women aged 15-24 have a spouse who is at least 10 older than them, while 39 per cent have a spouse who is 5-9 years older.

Table 11.6 (CP.6): Spousal age difference

Percentage distribution of currently married/in union women aged 15-19 and 20-24 years according to the age difference with their husband or partner, MICS Moyale district, 2008

	Percentages of currently married/in union women whose husband or partner is:						Number of women currently married/ in union
Characteristics	Younger	0-4 years older	5-9 years older	10+ years older*	Husband' s age unknown	Total	
Age							
15-19	0.0	15.7	40.8	41.7	1.9	100.0	61
20-24	0.0	15.8	38.8	43.5	1.9	100.0	153
Total	**0.0**	**15.8**	**39.4**	**43.0**	**1.9**	**100.0**	**214**

11.5 Female Genital Mutilation/Cutting

Female genital mutilation/cutting (FGM/C) is the partial or total removal of the female external genitalia, or other injury to the female genital organs. FGM/C is always traumatic with immediate complications including excruciating pain, shock, urine retention, ulceration of the genitals and injury to adjacent tissue. Other complications include septicaemia, infertility, obstructed labour, and even death. The procedure is generally carried out on girls between the ages of 4 to 14 years; it is also done to infants, women who are about to be married and, sometimes, to women who are pregnant with their first child or who have just given birth. It is often performed by traditional practitioners, including midwives and barbers, without anaesthesia, using scissors, razor blades or broken glass.

FGM/C is a fundamental violation of human rights. In the absence of any perceived medical necessity, it subjects girls and women to health risks and has life-threatening consequences. Among those rights violated are the rights to the highest attainable standard of health and to bodily integrity. Furthermore, it could be argued that girls (under 18) cannot be said to give informed consent to such a potentially damaging practice as FGM/C.

In MICS, a series of questions were asked to determine knowledge of FGM/C, prevalence of FGM/C, and details of the type of FGM/C performed. Tables 11.7 (CP.7) and 11.8 (CP.7) present the prevalence of FGM/C among women and the type and extent of the procedure as well as the woman's attitudes towards FGM/C.

Table 11.7 shows that in Moyale district, all women age 15-49 years have heard about FGM/C and nearly all of them (98 per cent) reported that they had undergone some form of FGM/C. The proportion of women who have had any form of FGM/C declines with increasing levels of the woman's education attainment as well as by levels of household wealth index. For example, 99 per cent of women aged 15-49 years with no education have had FGM/C compared with 92 per cent among those who are educated up to secondary or higher levels.

Among women who had the FGM/C, 87 per cent had flesh removed and about eight per cent had an extreme form of FGM/C, i.e., both the removal of flesh from the genital area and sewing done to close the genital area.

Table 11.7 (CP.7): Female genital mutilation/cutting(FGM/C)

Percentages of women aged 15-49 years who have heard about female genital mutilation/cutting (FGM/C), had any form of FGM/C, type of FGM/C among those who have had FGM/C, the percentages who have had the extreme form of FGM/C (infibulations), MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Heard about FGM/C	Had any form of FGM/C*	Number of women aged 15-49 years	Percentages of women with FGM/C who: Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total	Had an extreme form of FGM/C**	Number of women with FGM/C
Age										
15-19	100.0	96.5	204	90.3	0.0	7.1	2.7	100.0	7.1	196
20-24	100.0	95.3	204	83.5	4.5	10.2	1.8	100.0	9.3	195
25-29	100.0	97.2	191	87.7	5.3	5.8	1.3	100.0	5.8	186
30-34	100.0	99.1	158	88.9	3.3	5.6	2.2	100.0	5.6	156
35-39	100.0	99.5	111	79.2	1.9	14.5	4.5	100.0	14.5	111
40-44	100.0	98.6	103	90.9	0.0	8.0	1.1	100.0	8.0	101
45-49	100.0	100.0	60	92.5	2.0	4.1	1.3	100.0	4.1	60
Education										
None	100.0	98.5	747	85.4	3.1	9.0	2.5	100.0	8.9	736
Primary	100.0	95.7	220	92.1	1.9	5.0	0.9	100.0	4.5	211
Secondary +	100.0	91.9	64	93.0	0.0	5.1	1.9	100.0	5.1	59
Wealth index										
Low	100.0	99.1	550	85.0	3.2	9.2	2.7	100.0	9.2	545
Medium	100.0	97.2	185	88.9	2.0	6.7	2.5	100.0	6.1	180
High	100.0	94.8	296	90.7	2.1	6.3	0.8	100.0	6.1	280
Total	**100.0**	**97.5**	**1,031**	**87.3**	**2.7**	**7.9**	**2.1**	**100.0**	**7.8**	**1,005**

* Women aged 15-49 reporting they had any type of female genital mutilation/cutting. Individual forms of FGM/C include the removal of flesh from the genital area, the nicking of the flesh of the genital area and sewing closed the genital area.
** Extreme form of FGM/C (infibulations) is defined as both the removal of flesh from the genital area AND sewing closed the genital area.

All those who have heard about FGM/C were asked about their attitude towards whether the practice should be continued or not, and the results are presented in Table 11.8 (CP.7). Nearly three in every five (59 per cent) women aged 15-49 years who have heard about FGM/C in Moyale district reported that the practice should be continued. There is a notable difference in approval of continuation of the practice between those women who have gone through the FGM/C experience (60 per cent) and those who have not (22 per cent). The proportion of women who believe that the practice should continue increases with increasing age of women, with the proportion among the 15-19 year olds approving being 48 per cent compared to 66 per cent among those in the 45-49 age group. About 68 per cent of women with no education who have heard about FGM/C want the practice to be continued versus 24 per cent among those who have attained secondary or higher education. This clearly indicates that educating women is an important factor in curbing the practice. Further, approval of FGM/C reduced with increasing levels of the household wealth index. For example, 67 per cent of women from low wealth index households want FGM/C continued versus 43 per cent among those from high wealth index households.

Table 11.8 (CP.7): Attitude towards Female genital mutilation/cutting(FGM/C)

Percentage distribution of women age 15-49 years who have heard about FGM/C according to attitudes towards whether the practice of FGM/C should be continued, MICS Moyale district, 2008

Characteristics	Percentage distribution of women age 15-49 years who believe the practice of FGM/C should:					Number of women aged 15-49 years who have heard of FGM/C
	Continue	Be discontinued	Depends on situation	Don't know	Total	
Age						
15-19	47.8	49.2	1.4	1.6	100.0	204
20-24	57.1	40.3	2.6	0.0	100.0	203
25-29	60.1	37.8	2.1	0.0	100.0	191
30-34	61.1	36.7	2.2	0.0	100.0	158
35-39	68.4	30.5	1.0	0.0	100.0	111
40-44	62.9	36.5	0.6	0.0	100.0	103
45-49	65.5	33.2	1.3	0.0	100.0	60
Mother's education						
None	68.3	30.1	1.4	0.3	100.0	746
Primary	36.7	60.7	2.1	0.5	100.0	219
Secondary +	23.6	71.2	5.1	0.0	100.0	64
Mother's FGM/C experience						
No	(21.7)	(78.3)	(0.0)	(0.0)	(100.0)	25
Yes	59.7	38.2	1.8	0.3	100.0	1,005
Wealth index						
Low	67.1	31.7	0.9	0.4	100.0	549
Medium	59.5	38.5	2.0	0.0	100.0	185
High	42.8	53.6	3.2	0.3	100.0	295
Total	**58.8**	**39.2**	**1.8**	**0.3**	**100.0**	**1,029**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

Table 11.9 (CP.9) presents the prevalence and extent of FGM/C performed on daughters of the respondents. All women aged between 15-49 years with at least one daughter were asked whether their daughters had undergone FGM/C or not. Nearly two in every five (38 per cent) reported that their daughter(s) had undergone the practice. Similar to the FGM/C practice findings among women age 15-49 years, the proportion of daughters undergoing FGM/C was also found decline with increasing levels of mother's education.

Table 11.9 (CP.8): Female genital mutilation/cutting (FGM/C) among daughters

Percentages of women with at least one living daughter who has had female genital mutilation/cutting (FGM/C), and the percentages by type of FGM/C of the daughters, MICS Moyale district,2008

Characteristics	Daughter had any form of FGM/C*	Number of women aged 15-49 years with at least one daughter	Percentages of women whose daughters: Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total	Daughter had an extreme form of FGM/C	Number of women aged 15-49 years with at least one living daughter who had FGM/C
Age of woman									
15-24	2.6	125	(*)	(*)	(*)	(*)	(*)	(*)	3
25-34	23.5	291	79.5	9.7	8.1	2.7	100.0	7.1	69
35-49	70.4	259	89.1	3.2	4.9	2.8	100.0	4.9	183
Education									
None	40.0	560	85.4	5.3	6.3	3.1	100.0	6.0	224
Primary	26.5	99	93.0	3.0	3.9	0.0	100.0	3.9	26
Secondary +	(*)	17	(*)	(*)	(*)	(*)	(*)	(*)	4
Mother's FGM/C experience									
Had any FGM/C	38.0	664	87.1	4.4	6.0	2.5	100.0	5.7	252
No FGM/C	17.4	12	0.0	73.5	0.0	26.5	100.0	0.0	2
Wealth index									
Low	33.0	382	81.4	5.2	9.4	4.1	100.0	8.8	126
Medium	56.0	116	92.9	5.3	1.8	0.0	100.0	1.8	65
High	35.7	178	89.8	4.1	3.4	2.7	100.0	3.4	63
Total	**37.6**	**676**	**86.4**	**4.9**	**5.9**	**2.7**	**100.0**	**5.7**	**254**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

11.6 Domestic Violence

A number of questions were addressed to women aged between 15-49 years to assess their attitudes towards whether husbands are justified to hit or beat their wives/partners for a variety of scenarios. These questions were asked to have an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands/partners. The main assumption here is that women that agree with the statements indicating that husbands/partners are justified to beat their wives/partners under the situations described in reality tend to be abused by their own husbands/partners. The responses to these questions are summarized in Table 11.10 (CP.10).

The results show that 81 per cent of women in Moyale believe that a husband is justified to beat his wife for any one of a number of reasons. Neglecting children was the most sighted reason for this justification (73 per cent), followed by going out without seeking permission from him, arguing with the husband, refusing to have sex with the husband, and lastly burning the food. Young women (15-19 year) were less likely to approve of any beating (60 per cent).

The proportion of women who believe a husband is justified in beating his wife/partner for any reason was higher among currently married women (89 per cent) versus formerly married (74 per cent) or never married (49 per cent). Similarly the proportion of women who believe a husband is justified in beating his wife/partner for any reason declined with increasing levels of the woman's educational attainment as well as by improving levels of the household wealth index.

Table 11.10 (CP.9): Attitudes toward domestic violence

Percentage of women aged 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, MICS Moyale district,2008

Characteristics	Percentage of women aged 15-49 years who believe a husband is justified in beating his wife/partner: When she goes out without telling him	When she neglects the children	When she argues with him	When she refuses sex with him	When she burns the food	For any of these reasons*	Number of women aged 15-49 years
Age							
15-19	46.1	52.6	44.3	34.1	21.9	59.5	204
20-24	70.2	74.5	63.7	67.0	35.1	82.5	204
25-29	76.5	81.4	72.6	70.3	33.0	87.4	191
30-34	79.3	78.8	73.6	72.3	28.9	89.6	158
35-39	73.2	74.0	74.9	67.9	37.2	85.9	111
40-44	78.5	81.1	76.1	72.2	39.9	86.7	103
45-49	68.6	77.3	69.0	65.0	33.3	78.7	60
Marital/Union status							
Currently married/ in union	78.4	82.5	75.2	72.7	36.3	89.1	770
Formerly married/ in union	62.4	58.5	55.5	60.8	27.9	73.7	62
Never married/ in union	34.9	40.1	32.4	23.0	15.1	49.1	198
Education							
None	76.1	78.8	72.7	69.6	36.2	85.7	747
Primary	51.7	58.2	49.3	47.7	20.1	69.2	220
Secondary +	45.9	54.5	41.6	29.8	19.8	58.6	64
Wealth index							
Low	75.1	76.5	75.0	69.7	35.3	84.4	550
Medium	70.4	73.5	61.1	60.8	28.8	81.3	185
High	56.9	65.9	51.6	50.0	26.9	72.7	296
Total	**69.0**	**72.9**	**65.8**	**62.4**	**31.8**	**80.5**	**1,031**

HIV/AIDS, Sexual Behavior, and Orphaned and Vulnerable Children

12

12.1 Knowledge of HIV Transmission and Condom Use

One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step towards raising awareness and giving young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Different regions are likely to have variations in misconceptions although some appear to be universal (for example that sharing food can transmit HIV or mosquito bites can transmit HIV). The UN General Assembly Special Session on HIV/AIDS (UNGASS) called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to measure this goal as well as the MDG of reducing HIV infections by half include improving the level of knowledge of HIV and its prevention, and changing behaviour to prevent further spread of the disease. The HIV module was administered to women 15-49 years of age.

One indicator which is both an MDG and UNGASS indicator is the percentage of young women who have comprehensive and correct knowledge of HIV prevention and transmission. Women were asked whether they knew of the three main ways of preventing HIV transmission i.e., having only one faithful uninfected partner, using a condom every time, and abstaining from sex. The results are presented in Table 12.1 (HA.1).

In Moyale district, most of the interviewed women (94 per cent) have heard of HIV/AIDS. However, only 47 per cent of the women know of all three main ways of preventing HIV transmission. Sixty six per cent of women know of using a condom every time, 62 per cent know of having one faithful uninfected sex partner, and 46 per cent know of abstaining from sex as main ways of preventing HIV transmission. Surprisingly, one in every four women (25 per cent) said they do not know any way of preventing transmission of HIV. The relationship between woman's age category and the diverse modes of HIV prevention varied: for example, the highest rate of knowledge of all three ways was 50 per cent for the 30-34 age group, whereas, as expected, the level of knowledge about preventing transmission of HIV increases with both education and level of household wealth index.

Table 12.1 (HA.1): Knowledge of preventing HIV transmission

Percentages of women aged 15-49 years who correctly identify means of HIV transmission from mother to child, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Know HIV can be transmitted from mother to child	Per cent who know HIV can be transmitted: During pregnancy	At delivery	Through breast milk	All three ways	Did not know any specific way	Number of women
Age							
15-19	81.9	49.1	65.8	79.6	45.8	10.7	204
20-24	85.0	51.3	70.7	80.7	48.4	6.4	204
25-29	89.0	52.8	70.7	84.1	46.0	7.0	191
30-34	85.2	56.9	67.1	82.9	50.1	10.4	158
35-39	81.2	45.2	61.1	77.2	41.8	12.8	111
40-44	90.3	53.6	66.9	87.9	47.5	4.6	103
45-49	90.4	48.9	72.5	90.4	43.0	8.6	60
Education							
None	82.4	50.2	63.1	78.6	44.5	10.0	747
Primary	93.4	54.0	78.0	92.2	50.6	5.6	220
Secondary +	95.5	57.5	88.4	91.8	56.6	2.8	64
Wealth index							
Lowest	80.7	46.7	58.5	76.8	41.2	10.1	550
Middle	88.2	51.8	74.2	85.6	45.8	8.6	185
Upper	93.0	60.0	81.4	90.6	57.1	5.8	296
Total	**85.6**	**51.5**	**67.9**	**82.3**	**46.6**	**8.6**	**1031**

Figure 12.1: Percentage of women who have comprehensive knowledge of HIV/AIDS transmission, MICS Moyale district, 2008

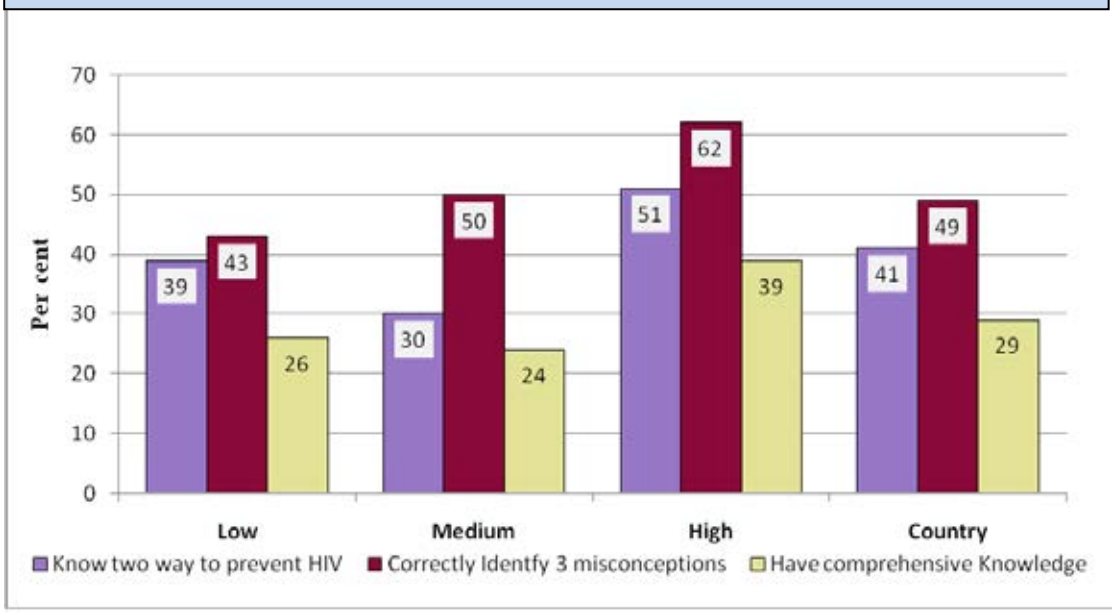


Table 12.2 (HA.2) presents the percentage of women who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions, that HIV can be transmitted by supernatural means, and by mosquito bites. The table also provides information on whether women know that HIV cannot be transmitted by sharing food, and that HIV can be transmitted by sharing needles.

One in every two interviewed women (49 per cent) rejects the two most common misconceptions (of supernatural and mosquito transmission) and know that a healthy-looking person can be infected. Looking at the breakdown, 88 per cent of women know that HIV cannot be transmitted by supernatural means, 85 per cent know that HIV cannot be transmitted by sharing food and 70 per cent know that HIV cannot be transmitted by mosquito bites. Eighty nine per cent know that sharing needles can transmit HIV and only 62 per cent of women know that a healthy-looking person can be infected.

From the table it is evident that a higher proportion of educated women can correctly identify misconceptions concerning HIV/ compared with their uneducated or primary level educated counterparts. The wealth status of households was also found to be positively related with correct identification of misconception on HIV/AIDS. However, there was no clear pattern mapping changing age categories to awareness of misconceptions.

Table 12.2 (HA.2): Identifying misconceptions about HIV/AIDS

Percentages of women aged 15-49 years who correctly identify misconceptions about HIV/AIDS, MICS Moyale district, Eastern Province, Kenya 2008

	Percentage who know that:				Percentage who know that:		
	HIV cannot be transmitted by:						
Characteristics	Option 1: Supernatural means	Option 2: Mosquito bites	A healthy looking person can be infected	Reject two most common misconceptions and know a healthy-looking person can be infected	Option 3: HIV cannot be transmitted by sharing food	Option 4: HIV can be transmitted by sharing needles	Number of women
Age							
15-19	86.9	70.9	60.0	51.5	85.6	87.3	204
20-24	84.4	65.4	60.9	47.8	79.9	88.1	204
25-29	91.2	73.3	60.0	51.4	85.5	90.7	191
30-34	92.5	69.3	65.8	49.9	85.9	89.1	158
35-39	85.6	68.7	70.1	52.4	87.8	91.7	111
40-44	87.1	71.3	61.9	47.9	85.1	87.3	103
45-49	93.8	70.0	48.9	36.8	86.2	97.3	60
Education							
None	85.9	65.7	59.7	46.2	81.9	87.8	747
Primary	94.7	78.5	66.4	56.3	91.8	93.0	220
Secondary +	95.0	87.0	68.0	63.5	92.8	97.0	64
Wealth index							
Low	84.6	64.0	56.7	42.5	79.3	85.6	550
Medium	91.1	70.1	64.0	49.7	89.9	91.6	185
High	93.5	80.3	69.5	62.0	91.6	95.2	296
Total	**88.3**	**69.8**	**61.7**	**49.4**	**84.7**	**89.4**	**1,031**

Note: This table is based on all women age 15-49 years

Table 12.3 (HA.3) summarizes information from Tables 12.1 (HA.1) and 12.2 (HA.2) and presents the percentages of women who know two ways of preventing HIV transmission and reject three common misconceptions. Comprehensive knowledge of HIV prevention methods and transmission is still fairly low in Moyale district. Overall, 29 per cent of women aged between 15-49 years in Moyale district were found to have comprehensive knowledge about HIV/AIDS. As expected, the proportion of women with comprehensive knowledge increases with the woman's education level. This pattern was less clear by levels of the household wealth index.

Table 12.3 (HA.3): Comprehensive knowledge of HIV/AIDS transmission

Percentages of women aged 15-49 years who have comprehensive knowledge of HIV/AIDS transmission, MICS Moyale district, 2008

Characteristics	Know 2 ways to prevent HIV transmission	Correctly identify 3 misconceptions about HIV transmission	Have comprehensive knowledge (identify 2 prevention methods and 3 misconceptions)*	Number of women
Age				
15-19	45.6	51.5	35.7	204
20-24	41.1	47.8	28.0	204
15-24	43.4	49.7	31.9	408
25-29	36.1	51.4	26.8	191
30-34	39.5	49.9	26.4	158
35-39	50.4	52.4	35.3	111
40-44	41.6	47.9	28.6	103
45-49	28.0	36.8	19.7	60
Education				
None	39.5	46.2	27.2	747
Primary	43.1	56.3	32.4	220
Secondary +	52.5	63.5	45.5	64
Wealth index				
Low	39.4	42.5	26.2	550
Medium	29.7	49.7	23.8	185
High	51.4	62.0	39.0	296
Total	**41.1**	**49.4**	**29.4**	**1,031**

Knowledge of mother-to-child transmission of HIV is also an important first step for women to seek HIV/AIDS testing when they are pregnant to avoid infecting the baby. Women should know that HIV/AIDS can be transmitted during pregnancy, delivery, and through breastfeeding. The level of knowledge among women aged 15-49 years concerning mother-to-child transmission is presented in Table 12.4 (HA.4). Overall, about 86 per cent of women know that HIV/AIDS can be transmitted from mother to child. The proportion of women who know all three ways of mother-to-child transmission is also quite high at 82 per cent, while proportion not knowing of any specific way is nine per cent. As expected, the proportion of women who know that HIV/AIDS can be transmitted from mother to child increases with improving levels of woman's education attainment. For example, these proportions were 82 per cent for women with no education, 93 per cent for women with primary education, and 96 per cent for women with secondary or higher education. Similar, knowledge of mother to child transmission improves with increasing levels of the household wealth index. .

Table 12.4 (HA.4): Knowledge of mother-to-child HIV transmission

Percentage of women aged 15-49 years who correctly identify means of HIV transmission from mother to child, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Know AIDS can be transmitted from mother to child	Percentage who know AIDS can be transmitted:				Did not know any specific way	Number of women
		During pregnancy	At delivery	Through breast milk	All three ways		
Age							
15-19	81.9	45.8	49.1	65.8	79.6	10.7	204
20-24	85.0	48.4	51.3	70.7	80.7	6.4	204
25-29	89.0	46.0	52.8	70.7	84.1	7.0	191
30-34	85.2	50.1	56.9	67.1	82.9	10.4	158
35-39	81.2	41.8	45.2	61.1	77.2	12.8	111
40-44	90.3	47.5	53.6	66.9	87.9	4.6	103
45-49	90.4	43.0	48.9	72.5	90.4	8.6	60
Education							
None	82.4	44.5	50.2	63.1	78.6	10.0	747
Primary	93.4	50.6	54.0	78.0	92.2	5.6	220
Secondary +	95.5	56.6	57.5	88.4	91.8	2.8	64
Wealth index							
Low	80.7	41.2	46.7	58.5	76.8	10.1	550
Medium	88.2	45.8	51.8	74.2	85.6	8.6	185
High	93.0	57.1	60.0	81.4	90.6	5.8	296
Total	**85.6**	**46.6**	**51.5**	**67.9**	**82.3**	**8.6**	**1,031**

The indicators on attitudes toward people living with HIV/AIDS measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would care for family member who is sick with AIDS; 2) would buy fresh vegetables from a vendor who was HIV positive; 3) thinks that a female teacher who is HIV positive should be allowed to teach in school; and 4) would ***not*** want to keep HIV status of a family member a secret. Table 12.5 (HA.5) presents the attitudes of Moyale district women towards people living with HIV/AIDS.

Stigma and discrimination are high in Moyale district, with 67 per cent of women aged between 15-49 years who have heard of HIV/AIDS agreeing with at least one discriminatory statement. The breakdown shows that 15 per cent of women would not care for a family member afflicted by HIV/AIDS. Twenty seven per cent would keep the HIV/AIDS condition of a family member a secret, 39 per cent believe that a teacher should not be allowed to work if he/she has HIV/AIDS, and nearly one in two women (50 per cent) would not buy food from a person who has HIV/AIDS. Differentials by background characteristics show that stigmatization decreases with increasing levels of the woman's education as well as by increasing levels of the household wealth index.

Table 12.5 (HA.5): Attitudes towards people living with HIV/AIDS

Percentage of women aged 15-49 years who have heard of AIDS who express a discriminatory attitude towards people living with HIV/AIDS, MICS Moyale district, 2008

	Percentage of women who:						
Characteristics	Would not care for a family member who was sick with AIDS	If a family member had HIV would want to keep it a secret	Believe that a teacher with HIV should not be allowed to work	Would not buy food from a person with HIV/AIDS	Agree with at least one discriminatory statement	Agree with none of the discriminatory statements	Number of women who have heard of AIDS
Age							
15-19	14.5	27.9	37.6	50.8	67.5	32.5	188
20-24	11.3	29.9	36.5	47.8	66.0	34.0	187
25-29	15.3	22.5	45.8	50.8	70.8	29.2	183
30-34	17.5	31.1	45.4	50.7	68.4	31.6	151
35-39	11.4	27.5	27.5	44.1	61.3	38.7	105
40-44	19.3	18.9	42.2	56.7	65.9	34.1	98
45-49	23.8	23.0	35.9	57.2	71.8	28.2	60
Education							
None	16.6	26.1	40.1	51.5	67.9	32.1	690
Primary	12.9	28.6	40.4	51.0	69.7	30.3	218
Secondary +	8.1	23.1	28.3	37.2	54.5	45.5	63
Wealth index							
Low	17.0	25.7	42.1	50.0	67.7	32.3	499
Medium	15.5	30.1	46.9	55.3	75.7	24.3	180
High	11.9	25.6	30.3	48.2	61.8	38.2	292
Total	**15.2**	**26.5**	**39.4**	**50.4**	**67.4**	**32.6**	**971**

Note: This table is based on women who have heard of AIDS.

Another important indicator that is key for prevention and treatment is the knowledge of where to be tested for HIV and use of such services. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested is summarized in Table 12.6 (HA.6). Overall, 61 per cent of the women in Moyale district know where to be tested, while 44 per cent have actually been tested. Among those tested, a large proportion received their results (97 per cent). The proportion of women with knowledge of where to get tested increases with increasing levels of educational attainment. For example, 83 per cent of women with secondary or higher levels of education have knowledge of a place to get tested for HIV/AIDS compared to 56 per cent among those with no education. Similarly, women from wealthy households have better knowledge of a place to get tested than women from low wealth index households.

Table 12.6 (HA.6): Knowledge of a facility for HIV testing

Percentages of women aged 15-49 years who know where to get an HIV test, percentages of women who have been tested and, of those tested the percentages who have been told the result, MICS Moyale district, 2008

Characteristics	Know a place to get tested*	Have been tested**	Number of women	If tested, have been told result	Number of women who have been tested for HIV
Age					
15-19	55.2	29.9	204	99.1	61
20-24	66.5	52.6	204	97.8	107
25-29	67.0	55.0	191	97.6	105
30-34	70.6	55.7	158	93.4	88
35-39	61.3	41.5	111	97.8	46
40-44	46.5	36.1	103	100.0	37
45-49	44.6	21.2	60	(*)	13
Education					
None	55.7	42.6	747	97.7	318
Primary	73.4	47.9	220	95.2	105
Secondary +	(83.3)	(53.1)	(64)	(100.0)	34
Wealth index					
Low	49.1	34.2	550	97.7	188
Medium	66.6	47.5	185	95.9	88
High	80.2	61.3	296	97.6	181
Total	**61.2**	**44.4**	**1031**	**97.3**	**457**

* Women who know of a place to get tested for HIV include those women who have already been tested, including those tested during antenatal care.
** Women who have been tested for HIV includes those tested during antenatal care.
The first two columns of the table include all women in the denominator, even those who have not heard of AIDS.
In the fourth column, the denominator consists of women who have been tested and the numerator consists of total women
(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases men who have been told the results.

Among women who gave birth within the two years preceding the survey, the proportion who received counselling and HIV testing during antenatal care is summarized in Table 12.7 (HA.7). Seventy one per cent of women aged 15-59 years in Moyale district who gave birth in the two years preceding the survey received antenatal care from a health professional. About 60 per cent of these women were provided with information about HIV prevention and tested for HIV during an antenatal care visit. Among those tested for HIV, 61 per cent received the results of the HIV test during the antenatal care visit. The proportion of women who were tested for HIV during the ANC visit or those who received counselling during an antenatal care visit increased with increasing levels of household wealth index. A similar pattern was observed with increasing levels of the woman's education attainment.

Table 12.7 (HA.7): HIV testing and counseling coverage during antenatal care

Percentage of women aged 15-49 years who gave birth in the two years preceding the survey who were offered HIV testing and counseling with their antenatal care, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Percentage of women who: Received antenatal care from a health care professional for last pregnancy	Were provided information about HIV prevention during ANC visit	Were tested for HIV at ANC visit	Received results of HIV test at ANC visit	Number of women who gave birth in the 2 years preceding the survey
Age					
15-19	(71.2)	(63.4)	(65.0)	(63.7)	41
20-24	71.7	60.5	60.8	60.1	107
25-29	70.7	60.2	62.1	61.2	111
30-34	73.9	59.6	62.1	57.4	85
35-49	64.8	59.1	57.1	57.1	78
Education					
None	65.9	53.9	55.4	54.0	336
Primary	88.7	84.8	82.7	80.4	75
Secondary +	(*)	(*)	(*)	(*)	12
Wealth index					
Low	57.7	44.9	46.4	45.2	237
Medium	76.8	69.1	70.6	69.1	75
High	93.9	87.4	86.4	84.2	111
Total	**70.6**	**60.3**	**61.1**	**59.6**	**423**

(*) Based on less than 25 un-weighted cases.
( ) Based on 25-50 un-weighted cases

12.2 Orphans and Vulnerable Children

As the HIV/AIDS epidemic progresses, more and more children are becoming orphaned and vulnerable because of HIV/AIDS. Children are classified as orphaned if they have experienced the death of either parent. Children who are orphaned or in vulnerable households may be at increased risk of neglect or exploitation if the parents are not available to assist them. Monitoring the variations in different outcomes for orphans and vulnerable children (OVCs) and comparing them to their peers gives us a measure of how well communities and governments are responding to their needs.

To monitor these variations, a measurable definition of OVCs needed to be created. The UNAIDS Monitoring and Evaluation Reference Group developed a proxy definition of children who have been affected by adult morbidity and mortality. This should capture many of the children affected by HIV/AIDS in countries where a significant proportion of the adults are infected with HIV/AIDS. This definition classifies children as orphaned and vulnerable if they have experienced the death of either parent, or if either parent is chronically ill, or if an adult (aged 18-59 years) in the household either died (after being chronically ill) or was chronically ill in the year prior to the survey. The frequency of children living with neither parent i.e. mother only and father only is presented in Table 12.8 (HA.10).

Seventy six per cent of children in Moyale district aged 0-17 years live with both parents, while nine per cent do not live with any biological parent. About nine per cent of children aged between 0-17 years are orphans who have lost one or both parents. As expected, the proportion of children not living with parents increases with age of the child.

Table 12.8 (HA.10): Children's living arrangements and orphan hood

Percentage distribution of children aged 0-17 years according to living arrangements, percentages of children aged 0-17 years in households not living with a biological parent and percentages of children who are orphans, MICS Moyale district, Eastern Province, Kenya 2008

Characteristics	Living with both parents	Living with neither parent				Living with mother only		Living with father only		Impossible to determine	Total	Not living with a biological parent*	One or both parents dead**	Number of children
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead					
Sex														
Male	76.0	0.5	0.8	5.3	1.2	7.7	6.2	1.2	1.0	0.2	100.0	7.8	9.7	1,912
Female	76.6	0.9	1.0	7.1	1.4	6.3	4.7	1.0	0.8	0.3	100.0	10.3	8.7	1,727
Age														
0-4 years	85.3	0.2	0.3	3.9	0.3	7.6	2.0	0.3	0.0	0.2	100.0	4.7	2.7	1,016
5-9 years	78.2	1.2	1.0	6.1	0.3	6.6	4.6	1.1	0.8	0.1	100.0	8.6	7.9	1,148
10-14 years	71.9	0.5	1.2	6.9	2.5	6.5	7.7	1.7	0.9	0.1	100.0	11.2	12.9	1,032
15-17 years	60.8	0.7	1.0	9.7	3.3	7.9	10.6	1.9	3.0	1.2	100.0	14.7	18.5	444
Wealth index														
Low	77.3	0.3	0.8	7.1	1.2	5.4	6.2	0.3	1.1	0.3	100.0	9.5	9.6	2,029
Medium	74.6	1.5	0.3	5.3	1.0	7.2	6.0	2.3	1.6	0.3	100.0	8.0	10.3	681
High	75.2	0.8	1.4	4.8	1.6	10.5	3.5	2.0	0.0	0.1	100.0	8.7	7.4	930
Total	**76.3**	**0.7**	**0.9**	**6.2**	**1.3**	**7.0**	**5.5**	**1.1**	**0.9**	**0.2**	**100.0**	**9.0**	**9.2**	**3,639**

*Children who are not living with at least one biological parent, either because the parents live elsewhere or because the parents are dead.
**Children for whom one or both biological parents are dead.
The denominator in this table is children age 0-17 years enumerated in the household listing.

Table 12.9 (HA.11) provides information on categories of OVCs aged between 0-17 years. Overall, 12 per cent of children in the age group 0-17 years were orphans and vulnerable children (OVCs). The proportions of OVCs by levels of household wealth index appear to be very comparable. However, the proportion of OVCs seems to increase with increasing age of the child. Similarly, the proportion of children with one or both parents dead increases with age of the child.

Table 12.9 (HA.9): Prevalence of orphan hood and vulnerability among children

Percentage of children aged 0-17 years who are orphaned or vulnerable due to AIDS, MICS Moyale district, 2008

Characteristics	Chronically ill parent	Adult death in household	Chronically ill adult in household	Vulnerable children*	One or both parents dead**	Orphans and vulnerable children	Number of children aged 0-17 years
Sex							
Male	0.3	0.6	3.5	4.3	9.7	12.5	1912
Female	0.4	0.9	3.1	4.1	8.7	11.4	1727
Age							
0-4 years	0.2	0.5	2.5	3.2	2.7	5.4	1016
5-9 years	0.5	0.7	3.6	4.4	7.9	10.9	1148
10-14 years	0.2	1.1	3.7	4.8	12.9	15.3	1032
15-17 years	0.4	0.4	3.5	4.4	18.5	21.8	444
Wealth index							
Low	0.4	0.5	3.1	4.0	9.6	12.6	2029
Medium	0.6	1.7	3.2	4.4	10.3	12.5	681
High	0.0	0.5	3.9	4.4	7.4	10.3	930
Total	**0.3**	**0.7**	**3.3**	**4.2**	**9.2**	**12.0**	**3639**

The columns of the table are produced as follows:
1) Either parent has been chronically ill for 3 of the 12 months preceding the survey
2) Adult death in the household after a chronic illness of 3 of the 12 months preceding the survey
3) Any adult in the household has been sick for 3 of the 12 months preceding the survey
4) A vulnerable child is defined as a child who lives in a household where any of the preceding 3 conditions is true.
5) A child is an orphan if one or both of his/her biological parents is dead
6) Orphaned or vulnerable children are those defined in columns 4 or 5.
7) Total number of children aged 0-17 years as enumerated in the household listing.
An orphan is a child aged 0-17 years who has lost one or both parents

One of the measures developed for the assessment of the well-being of OVC relative to their peers looks at the school attendance of children aged 10-14years for those who have lost both parents (double orphans) versus children whose parents are alive (and who live with at least one of these parents). If children whose parents died have less access to school as their peers, then families and schools are not ensuring that these children's rights are being met.

Table 12.10 (HA.12) presents the results for school attendance among OVCs. Among children who have lost both parents, 64 per cent are currently attending school with a nearly 12 percentage point difference between attendance for males (58 per cent) and females (70 per cent). For children aged between 10-14 who have not lost a parent and who live with at least one parent, the school attendance is 85 per cent, with a nearly 9 percentage point difference between attendance for males (89 per cent) and females (80 per cent). The differences between attendance levels for OVCS and non-OVCS is quite wide and points to a marked disadvantage for orphans and vulnerable children in Moyale district. Among OVCS, school attendance does not appear to vary much by levels of the household wealth index. For non-orphans, clearly school attendance increases with improving levels of the household wealth index. Overall, the OVC/non-OVC school attendance ratio is 0.8, meaning that for every 100 non-OVCs in school, there are only 80 OVCs.

Table 12.10 (HA.10): School attendance of non-orphans and orphaned and vulnerable children

School attendance of children aged 10-14 years by orphanhood and vulnerability due to AIDS, MICS, Moyale district, 2008

Characteristics	Percentage of children whose mother and father have died	School attendance rate of children whose mother and father have died	Percentage of children of whom both parents are alive and child is living with at least one parent	School attendance rate of children of whom both parents are alive and child is living with at least one parent	Double orphans to non-orphans school attendance ratio*	Percentage of children who are orphaned or vulnerable	School attendance of children who are orphaned or vulnerable	Percentage of children who are not orphaned or vulnerable	School attendance of children who are not orphaned or vulnerable	OVC vs non-OVC school attendance ratio	Total number of children aged 10-14 years
Sex											
Male	2.5	58.4	79.1	89.2	0.7	17.0	73.3	83.0	89.9	0.8	518
Female	2.6	69.7	81.1	80.1	0.9	13.7	70.0	86.3	80.1	0.9	514
Wealth index											
Low	2.5	77.4	79.4	75.7	1.0	16.6	65.4	83.4	77.1	0.8	547
Medium	1.3	0.0	81.1	93.7	0.0	16.8	75.1	83.2	94.5	0.8	215
High	3.6	64.6	80.6	95.1	0.7	11.6	86.8	88.4	92.9	0.9	270
Total	**2.5**	**64.1**	**80.1**	**84.6**	**0.8**	**15.3**	**71.9**	**84.7**	**84.9**	**0.8**	**1,032**

In many countries, few services are available to families that have taken in children who are orphaned or vulnerable. Community-based organizations and governments need to be sure that families are supported to care for these children. The level and types of support provided to Moyale households caring for OVCs is presented in Table 12.11 (HA.13). Nearly 81 per cent of households with OVC aged 0-17 years did not receive any form of support during the year preceding the survey, leaving only 19 per cent of OVCs households that received some form of support. Most of the support received was educational support (15 per cent) followed by social/material support in the three months preceding the survey. However, there was no household that received all types of support.

Table 12.11 (HA.11): Support for children orphaned and vulnerable due to HIV/ AIDS

Percentages of children aged 0-17 years orphaned or made vulnerable due to AIDS whose households receive free basic external support in caring for the child, MICS Moyale district, Eastern Province, Kenya 2008

	Percentage of OVC whose households received:							
Characteristics	Medical support (in last 12 months)	Emotional and psychosocial support (in last 3 months	Social/ material support (in last 3 months)	Educational support (in last 12 months)	Any support*	All types of support	No support at all	Number of children orphaned or vulnerable aged 0-17 years
Sex								
Male	1.6	0.2	4.1	16.2	18.0	0.0	82.0	239
Female	4.8	0.0	7.0	13.4	19.9	0.0	80.1	197
Age								
0-4 years	0.0	0.0	3.6	0.0	3.6	0.0	96.4	55
5-9 years	2.9	0.4	7.5	19.2	23.6	0.0	76.4	126
10-14 years	3.6	0.0	5.2	15.7	20.1	0.0	79.9	158
15-17 years	4.0	0.0	4.1	16.6	19.3	0.0	80.7	97
Wealth index								
Low	2.1	0.0	2.0	11.7	13.4	0.0	86.6	255
Medium	5.4	0.6	21.8	25.2	36.2	0.0	63.8	85
High	3.5	0.0	0.0	14.5	18.0	0.0	82.0	95
Total	**3.1**	**0.1**	**5.4**	**14.9**	**18.9**	**0.0**	**81.1**	**435**

OVC due to AIDS (OVC) includes children whose mother or father have died (regardless of cause), who live in a household with a chronically ill adult, whose parents are chronically ill, or who live in a household where an adult who was chronically ill has died in the past year.

List of References

Boerma, J. T., Weinstein, K. I., Rutstein, S.O., and Sommerfelt, A. E. , 1996. Data on Birth Weight in Developing Countries: Can Surveys Help? *Bulletin of the World Health Organization*, 74(2), 209-16.

Blanc, A. and Wardlaw, T. 2005. "Monitoring Low Birth Weight: An Evaluation of International Estimates and an Updated Estimation Procedure". *WHO Bulletin*, 83 (3), 178-185.

Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro. 2004. *Kenya Demographic Health Survey 2003*. Calverton, Maryland: CBS, MOH, and ORC Macro.

Filmer, D. and Pritchett, L., 2001. Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India. *Demography* 38(1): 115-132.

Rutstein, S.O. and Johnson, K., 2004. *The DHS Wealth Index*. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.

UNICEF, 2006. Monitoring the Situation of Children and Women. Multiple Indicator Cluster Survey Manual, New York.

United Nations, 1990a. QFIVE, United Nations Program for Child Mortality Estimation. New York, UN Pop Division

United Nations, 1990b. Step-by-step Guide to the Estimation of Child Mortality. New York, UN www.Childinfo.org.

Appendix A: Sample Design

The major features of sample design are described in this appendix. Sample design features include target sample size, sample allocation, sample frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the Moyale Multiple Indicator Cluster Survey (MICS) was to produce statistically reliable estimates of most indicators, at the district level. A two-stage, cluster sampling approach was used for the selection of the survey sample. Further, the households were stratified into two groups one with a child below 3 years (stratum-1) and the other without a child below 3 years (stratum-2) at the time of household listing, and more households from stratum-1 were selected to get more children in the sample from less number of households. The cluster level stratification was done to net more children and mothers who have given birth during the last few years into the sample.

Sample Size and Sample Allocation

The target sample size for the Moyale MICS was calculated as 1,200 households. For the calculation of the sample size, the key indicator used was the immunization coverage among children age 12-23 months. The following formula was used to estimate the required sample size for these indicators:

$$n = \frac{[\,4\,(r)\,(1\text{-}r)\,(f)\,(1.1)\,]}{[\,(0.12r)^2\,(p)\,(n_h)\,]}$$

Where
n is the required sample size, expressed as number of households
4 is a factor to achieve the 95 per cent level of confidence
r is the predicted or anticipated prevalence (coverage rate) of the indicator
1.1 is the factor necessary to raise the sample size by 10 per cent for non-response
f is the shortened symbol for *deff* (design effect)
0.12r is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 12 per cent of r (relative sampling error of r)
p is the proportion of the total population upon which the indicator, r, is based
n_h is the average household size.

For the calculation, r (the immunization coverage) was assumed to be 65 per cent. The value of *deff* (design effect) was taken as 1.3 based on estimates from previous surveys, p (percentage of children aged 12-23 months in the total population) was taken as 3.2 per cent, and n_h (average household size) was taken as 4.4 households.

The resulting number of households from this exercise was 1,519 households which is the sample size needed. But, by adopting the second level stratification the total number of households to be selected was 1,080. However, it was decided to sample 1,200 households. The average cluster size was determined as 24 households (16 from stratum-1 and 8 from stratum-2), based on a number of considerations, including the budget available, and the time that would be needed per team to complete one cluster. This implies a total of 50 clusters for the district.

Sampling Frame and Selection of Clusters

The 1999 census frame was used for the selection of clusters. Census enumeration areas (EAs) were defined as primary sampling units (PSUs), and were selected using systematic PPS (probability proportional to size) sampling procedures, based on the estimated sizes of the enumeration areas from the 1999 Population Census.

Listing and Mapping Activities

Since the sample frame (the 1999 Population Census) was not up to date, household lists in all selected enumeration areas were updated prior to the selection of households. For this purpose, listing and mapping teams were formed, who visited each enumeration area, and listed the occupied households. The households were stratified into two, one having a child below 3 years and the other without a child below 3 years.

The listing and mapping teams were oriented in a 3 day training program in Embu, which include class room sessions and field practice. The training was facilitated by experts from KNBS and UNICEF. The district listing and mapping team consists of 3 teams; each team has a lister and a mapper. The teams were supervised by the District Statistical Officer (DSO) on a daily basis, who also attended the 3 days training program. One team was given two days to list an EA[7] and segmentation was allowed for larger EAs with more than 200 households.

Selection of Households

Lists of households were prepared by the listing teams in the field for each enumeration area. The households were grouped into two stratums based on whether the household has a child below 3 years or not. The households were then sequentially numbered from 1 to n_1 and n_2, where n_1 is the total number of households in stratum-1 (i.e., with a child below 3 years) and n_2 is the total number of households in stratum-2 (i.e., with out a child below 3 years) ($n_1 + n_2$ is the total number of households in each enumeration area) at the District Statistical Office, where selection of 16 households from stratum-1 and 8 households from straum-2 were carried out using systematic selection procedures using a random start.

Calculation of Sample Weights

The Moyale Multiple Indicator Cluster Survey sample is not self-weighted at cluster level due to cluster level stratification. Therefore, for separate weights were calculated for each of the stratums within a cluster and they were normalized at the district level. The sample weight or multiplier computation formula is given below:

$$\frac{Zd}{nd} \; X \; \frac{1}{zdi} \; X \; sdi \; X \; \frac{Hdji}{hdji}$$

Where,

Zd = total population of the district ‘d’,

nd = total number of clusters in district ‘d’,

zdi = number of households in the ith cluster of district ‘d’,

sdi = number of segments in the ith cluster of district ‘d’,

$Hdji$ = total number of households listed in the jth stratum of ith cluster in the district ‘d’, and

$hdji$ = number of households surveyed in the jth stratum of ith cluster in the district ‘d’.

[7] For all sampled EAs, both EA and Sub-location maps were developed by the cartography division of KNBS. These maps were provided to the listing and mapping teams to identify the boundaries of EA’s accurately and also to map the structures in them.

As mentioned earlier, 50 clusters were selected from the Moyale district 2009 Census EA list using the PPS sampling methodology. However, we have computed final multipliers after combining 4-5 clusters because of small sample size in some of the cluster level stratums.

These weights were then standardized (or normalized), one purpose of which is to make the sum of the interviewed sample units equal the total sample size at the district level. Normalization is performed by multiplying the aforementioned unadjusted weights by the ratio of the number of completed households to the total unadjusted weighted number of households. A similar standardization procedure was followed in obtaining standardized weights for the women's and under-5's questionnaires. For the anthropometry additional weights were computed using the non-response for anthropometry section.

Sample weights were appended to all data sets and analyses were performed by weighting each household, woman or under-5 with these sample weights.

Appendix B: List of Personnel Involved in the Survey

Project Director

Mr. A. K. M. Kilele, Director General, KNBS

Technical Co-ordinators

Mr. James Gatungu, KNBS
Mr. Christopher Omolo, KNBS

Cluster Development Co-ordinator

Mr. Omondi Omenya

Supervisor

Maina Munene
Enumerators
Yusuf Shanko
Galm Waqo Guyo
Hussein Nguyo
James Njuguna Njoroge
Qamaria Abdullahi
Bashir Maalim Hussein

Data Collection Co-ordinator

Mr. Henry Osoro
Supervisors
Golicha Dida
Paul Onyango

Field Editors

Siyad Robow Hussein
Nassir Abas Mohamed

Research Assistants

Adan A. Abdi
Halima Dida Kalicha
Amina Mulu
Molu Boru Racho
Sake Adan Daro
Habiba Shanko

Appendix C: Estimates of Sampling Errors

The sample of respondents selected in the Moyale Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented in this appendix for each of the selected indicators:

Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance. The Taylor linearization method is used for the estimation of standard errors.
Coefficient of variation (*se*/*r*) is the ratio of the standard error to the value of the indicator
Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (*deft*) is used to show the efficiency of the sample design. A *deft* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deft* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.

Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ($p + 2.se$ or $p - 2.se$) of the statistic in 95 per cent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 14 Complex Samples module has been used, except for the under-five mortality and infant mortality, where CSPro program is used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and un-weighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest at the district level. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.9 show the calculated sampling errors.

Appendix D: Data Quality Tables

Table DQ.2: Age distribution of eligible and interviewed women, Moyale District

		Household population of women age 10-54	Interviewed women age 15-49		4
		Number	Number	Per cent	Percentage of eligible women interviewed
Age	10-14	514	.	.	.
	15-19	294	197	19.6	67.0
	20-24	223	198	19.7	88.8
	25-29	191	185	18.5	97.1
	30-34	165	160	15.9	96.9
	35-39	121	110	10.9	90.9
	40-44	100	98	9.7	98.2
	45-49	55	55	5.5	100.0
	50-54	105	.	.	.
6	15-49	1148	1003	100.0	87.3

Appendix E: MICS Indicators - Numerators and Denominators

INDICATOR		NUMERATOR	DENOMINATOR
1	Under-five mortality rate	Probability of dying by exact age 5 years	
2	Infant mortality rate	Probability of dying by exact age 1 year	
3	Maternal mortality ratio	Number of deaths of women from pregnancy-related causes in a given year	Number of live births in the year (expressed per 100,000 births)
4	Skilled attendant at delivery	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that were attended during childbirth by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
5	Institutional deliveries	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that delivered in a health facility	Total number of women surveyed aged 15-49 years with a birth in 2 years preceding the survey
6	Underweight prevalence	Number of children under age five that fall below minus two standard deviations from the median weight for age of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five that were weighed
7	Stunting prevalence	Number of children under age five that fall below minus two standard deviations from the median height for age of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five measured
8	Wasting prevalence	Number of children under age five that fall below minus two standard deviations from the median weight for height of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five weighed and measured
9	Low-birth weight infants	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams	Total number of last live births in the 2 years preceding the survey
10	Infants weighed at birth	Number of last live births in the 2 years preceding the survey that were weighed at birth	Total number of last live births in the 2 years preceding the survey
11	Use of improved drinking water sources	Number of household members living in households using improved sources of drinking water	Total number of household members in households surveyed
12	Use of improved sanitation facilities	Number of household members using improved sanitation facilities	Total number of household members in households surveyed
13	Water treatment	Number of household members using water that has been treated	Total number of household members in households surveyed
14	Disposal of child's faeces	Number of children under age three whose (last) stools were disposed of safely	Total number of children under age three surveyed
15	Exclusive breastfeeding rate	Number of infants aged 0-5 months that are exclusively breastfed	Total number of infants aged 0-5 months surveyed

INDICATOR		NUMERATOR	DENOMINATOR
16	Continued breastfeeding rate	Number of infants aged 12-15 months, and 20-23 months, that are currently breastfeeding	Total number of children aged 12-15 months and 20-23 months surveyed
17	Timely complementary feeding rate	Number of infants aged 6-9 months that are receiving breast milk and complementary foods	Total number of infants aged 6-9 months surveyed
18	Frequency of complementary feeding	Number of infants aged 6-11 months that receive breast milk and complementary food at least the minimum recommended number of times per day (two times per day for infants aged 6-8 months, three times per day for infants aged 9-11 months)	Total number of infants aged 6-11 months surveyed
19	Adequately fed infants	Number of infants aged 0-11 months that are appropriately fed: infants aged 0-5 months that are exclusively breastfed and infants aged 6-11 months that are breastfed and ate solid or semi-solid foods the appropriate number of times (see above) yesterday	Total number of infants aged 0-11 months surveyed
20	Antenatal care	Number of women aged 15-49 years that were attended at least once during pregnancy in the 2 years preceding the survey by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
21	Contraceptive prevalence	Number of women currently married or in union aged 15-49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women aged 15-49 years that are currently married or in union
22	Antibiotic treatment of suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks receiving antibiotics	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
23	Care-seeking for suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks that are taken to an appropriate health provider	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
24	Solid fuels	Number of residents in households that use solid fuels (wood, charcoal, crop residues and dung) as the primary source of domestic energy to cook	Total number of residents in households surveyed
25	Tuberculosis immunization coverage	Number of children aged 12-23 months receiving BCG vaccine before their first birthday	Total number of children aged 12-23 months surveyed
26	Polio immunization coverage	Number of children aged 12-23 months receiving OPV3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
27	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Number of children aged 12-23 months receiving DPT3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
28	Measles immunization coverage	Number of children aged 12-23 months receiving measles vaccine before their first birthday	Total number of children aged 12-23 months surveyed
29	Hepatitis B immunization coverage	Number of children aged 12-23 months immunized against hepatitis before their first birthday	Total number of children aged 12-23 months surveyed
30	Yellow fever immunization coverage	Number of children aged 12-23 months immunized against yellow fever before their first birthday	Total number of children aged 12-23 months surveyed
31	Fully immunized children	Number of children aged 12-23 months receiving DPT1-3, OPV-1-3, BCG and measles vaccines before their first birthday	Total number of children aged 12-23 months surveyed

INDICATOR		NUMERATOR	DENOMINATOR
32	Neonatal tetanus protection	Number of mothers with live births in the previous year that were given at least two doses of tetanus toxoid (TT) vaccine within the appropriate interval prior to giving birth	Total number of women surveyed aged 15-49 years with a birth in the year preceding the survey
33	Use of oral Rehydration therapy (ORT)	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received oral Rehydration salts and/or an appropriate household solution	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
34	Home management of diarrhoea	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
35	Received ORT or increased fluids and continued feeding	Number of children aged 0-59 months with diarrhoea that received ORT (oral Rehydration salts or an appropriate household solution) or received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
36	Household availability of insecticide-treated nets (ITNs)	Number of households with at least one mosquito net, either permanently treated or treated within the previous year	Total number of households surveyed
37	Under-fives sleeping under insecticide- treated nets	Number of children aged 0-59 months that slept under an insecticide-treated mosquito net the previous night	Total number of children aged 0-59 months surveyed
38	Under-fives sleeping under mosquito nets	Number of children aged 0-59 months that slept under a mosquito net the previous night	Total number of children aged 0-59 months surveyed
39	Anti-malarial treatment (under-fives)	Number of children aged 0-59 months reported to have had fever in the previous 2 weeks that were treated with an appropriate anti-malarial within 24 hours of onset	Total number of children aged 0-59 months reported to have had fever in the previous 2 weeks
40	Intermittent preventive malaria treatment (pregnant women)	Number of women receiving appropriate intermittent medication to prevent malaria (defined as at least 2 doses of SP/Fansidar) during the last pregnancy, leading to a live birth within the 2 years preceding the survey	Total number of women that have had a live birth within the 2 years preceding the survey
41	Iodized salt consumption	Number of households with salt testing 15 parts per million or more of iodine/iodate	Total number of households surveyed
42	Vitamin A supplementation (under-fives)	Number of children aged 6-59 months receiving at least one high-dose vitamin A supplement in the previous 6 months	Total number of children aged 6-59 months surveyed
43	Vitamin A supplementation (post-partum mothers)	Number of women with a live birth in the 2 years preceding the survey that received a high-dose vitamin A supplement within 8 weeks after birth	Total number of women that had a live birth in the 2 years preceding the survey
44	Content of antenatal care	Number of women with a live birth in the 2 years preceding the survey that received antenatal care during the last pregnancy	Total number of women with a live birth in the 2 years preceding the survey
45	Timely initiation of breastfeeding	Number of women with a live birth in the 2 years preceding the survey that put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey
46	Support for learning	Number of children aged 0-59 months living in households in which an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months surveyed
47	Father's support for learning	Number of children aged 0-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months
48	Support for learning: children's books	Number of households with three or more children's books	Total number of households surveyed
49	Support for learning: non-children's books	Number of households with three or more non-children's books	Total number of households surveyed

INDICATOR		NUMERATOR	DENOMINATOR
50	Support for learning: materials for play	Number of households with three or more materials intended for play	Total number of households surveyed
51	Non-adult care	Number of children aged 0-59 months left alone or in the care of another child younger than 10 years of age in the past week	Total number of children aged 0-59 months surveyed
52	Pre-school attendance	Number of children aged 36-59 months that attend some form of early childhood education programme	Total number of children aged 36-59 months surveyed
53	School readiness	Number of children in first grade that attended some form of pre-school the previous year	Total number of children in the first grade surveyed
54	Net intake rate in primary education	Number of children of school-entry age that are currently attending first grade	Total number of children of primary- school entry age surveyed
55	Net primary school attendance rate	Number of children of primary-school age currently attending primary or secondary school	Total number of children of primary- school age surveyed
56	Net secondary school attendance rate	Number of children of secondary-school age currently attending secondary school or higher	Total number of children of secondary-school age surveyed
57	Children reaching grade five	Proportion of children entering the first grade of primary school that eventually reach grade five	
58	Transition rate to secondary school	Number of children that were in the last grade of primary school during the previous school year that attend secondary school	Total number of children that were in the last grade of primary school during the previous school year surveyed
59	Primary completion rate	Number of children (of any age) attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school) surveyed
60	Adult literacy rate	Number of women aged 15-24 years that are able to read a short simple statement about everyday life	Total number of women aged 15-24 years surveyed
61	Gender parity index	Proportion of girls in primary and secondary education	Proportion of boys in primary and secondary education
62	Birth registration	Number of children aged 0-59 months whose births are reported registered	Total number of children aged 0-59 months surveyed
63	Prevalence of female genital mutilation/cutting (FGM/C)	Number of women aged 15-49 years that reported undergoing any form of genital mutilation/cutting	Total number of women aged 15-49 years surveyed
64	Prevalence of extreme form of FGM/C	Number of women aged 15-49 years that reported undergoing an extreme form of genital mutilation/cutting (such as infibulation's)	Total number of women aged 15-49 years surveyed
65	Prevalence of FGM/C among daughters	Number of women aged 15-49 years that reported that at least one daughter had undergone female genital mutilation/cutting	Total number of women aged 15-49 years surveyed that have at least one living daughter
66	Approval for FGM/C	Number of women aged 15-49 years favouring the continuation of female genital mutilation/cutting	Total number of women aged 15-49 years surveyed
67	Marriage before age 15 and age 18	Number of women that were first married or in union by the exact age of 15 and the exact age of 18, by age groups	Total number of women aged 15-49 years and 20-49 years surveyed, by age groups

INDICATOR		NUMERATOR	DENOMINATOR
68	Young women aged 15-19 years currently married or in union	Number of women aged 15-19 years currently married or in union	Total number of women aged 15-19 years surveyed
69	Spousal age difference	Number of women married/in union aged 15-19 years and 20-24 years with a difference in age of 10 or more years between them and their current spouse	Total number of women aged 15-19 and 20-24 years surveyed that are currently married or in union
70	Polygyny	Number of women in a polygynous union	Total number of women aged 15-49 years surveyed that are currently married or in union
71	Child labour	Number of children aged 5-14 years that are involved in child labour	Total number of children aged 5-14 years surveyed
72	Labourer students	Number of children aged 5-14 years involved in child labour activities that attend school	Total number of children aged 5-14 years involved in child labour activities
73	Student labourers	Number of children aged 5-14 years attending school that are involved in child labour activities	Total number of children aged 5-14 years attending school
74	Child discipline	Number of children aged 2-14 years that (1) experience only non-violent aggression, (2) experience psychological aggression as punishment, (3) experience minor physical punishment, (4) experience severe physical punishment	Total number of children aged 2-14 years selected and surveyed
75	Prevalence of orphans	Number of children under age 18 with at least one dead parent	Total number of children under age 18 surveyed
76	Prevalence of vulnerable children	Number of children under age 18 that have a chronically ill parent, that live in a household where an adult aged 18-59 years has died in the past year, or that live in a household where an adult aged 18-59 years has been chronically ill in the past year	Total number of children under age 18 surveyed
77	School attendance of orphans versus non-orphans	Proportion of double orphans (both mother and father dead) aged 10-14 years attending school	Proportion of children aged 10-14 years, both of whose parents are alive, that are living with at least one parent and are attending school
78	Children's living arrangements	Number of children aged 0-17 years not living with a biological parent	Total number of children aged 0-17 years surveyed
79	Malnutrition among children orphaned and made vulnerable by HIV/AIDS	Proportion of orphaned or vulnerable children under age five that are moderately or severely underweight, of all OVC under age five that are weighed	Proportion of children not classified as orphaned or vulnerable under age five that are moderately or severely underweight, of all children not classified as orphaned or vulnerable under age five that are weighed
80	Early sex among children orphaned and made vulnerable by HIV/AIDS	Proportion of OVC aged 15-17 years that had sex before age 15, of all OVC aged 15-17 years surveyed	Proportion of children not classified as orphaned or vulnerable aged 15-17 years that had sex before age 15, of all children not classified as orphaned or vulnerable aged 15-17 years surveyed
81	External support to children orphaned and made vulnerable by HIV/AIDS	Number of OVC under age 18 whose households received free basic external support in caring for the child	Number of OVC under age 18 surveyed

INDICATOR		NUMERATOR	DENOMINATOR
82	Comprehensive knowledge about HIV prevention among young people	Number of women aged 15-24 years that correctly identify two ways of avoiding HIV infection and reject three common misconceptions about HIV transmission	Total number of women aged 15-24 years surveyed
S83	Condom use with non-regular partners	Number of women aged 15-24 years reporting the use of a condom during sexual intercourse with their last non-marital, non-cohabiting sex partner in the previous 12 months	Total number of women aged 15-24 years surveyed that had a non-marital, non-cohabiting partner in the previous 12 months
84	Age at first sex among young people	Number of women aged 15-24 years that have had sex before age 15	Total number of women aged 15-24 surveyed
85	Higher risk sex in the last year	Number of sexually active women aged 15-24 years that have had sex with a non-marital, non-cohabitating partner in the previous 12 months	Total number of women aged 15-24 that were sexually active in the previous 12 months
86	Attitude towards people with HIV/AIDS	Number of women expressing acceptance on all four questions about people with HIV or AIDS	Total number of women surveyed
87	Women who know where to be tested for HIV	Number of women that state knowledge of a place to be tested	Total number of women surveyed
88	Women who have been tested for HIV	Number of women that report being tested for HIV	Total number of women surveyed
89	Knowledge of mother-to-child transmission of HIV	Number of women that correctly identify all three means of vertical transmission	Total number of women surveyed
90	Counselling coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received counselling on HIV/AIDS during this care	Total number of women that gave birth in the previous 24 months surveyed
91	Testing coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received the results of an HIV test during this care	Total number of women that gave birth in the previous 24 months surveyed
92	Age-mixing among sexual partners	Number of women aged 15-24 years that had sex in the past 12 months with a partner who was 10 or more years older than they were	Total number of sexually active women aged 15-24 years surveyed
93	Security of tenure	Number of household members living in urban households that lack formal documentation for their residence or that feel at risk of eviction	Number of urban household members in households surveyed
94	Durability of housing	Number of household members living in urban dwellings that are not considered durable	Number of urban household members in households surveyed
95	Slum household	Number of household members living in urban slums	Number of household members in urban households surveyed
96	Source of supplies	Number of children (or households) for whom supplies were obtained from public providers, presented separately for each type of supply: insecticide-treated mosquito nets, oral Rehydration salts, antibiotics and anti-malarials	Total number of children (or households) for whom supplies were obtained
97	Cost of supplies	Median cost of supplies obtained, presented separately for each type of supply and whether sourced from public or private providers: insecticide-treated mosquito nets, oral Rehydration salts, antibiotics and anti-malarials.	Total number of children (or households) for whom supplies were obtained
98	Unmet need for family planning	Number of women that are currently married or in union that are fecund and want to space their births or limit the number of children they have and that are not currently using contraception	Total number of women interviewed that are currently married or in union

INDICATOR		NUMERATOR	DENOMINATOR
99	Demand satisfied for family planning	Number of women currently married or in union that are currently using contraception	Number of women currently married or in union that have an unmet need for contraception or that are currently using contraception
100	Attitudes towards domestic violence	Number of women that consider that a husband/partner is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women surveyed
101	Child disability	Number of children aged 2-9 years with at least one of nine reported disabilities: (1) delay in sitting, standing or walking, (2) difficulty seeing, either in the daytime or at night, (3) appears to have difficulty hearing, (4) difficulty in understanding instructions, (5) difficulty walking or moving arms or has weakness or stiffness of limbs, (6) has fits, becomes rigid, loses consciousness, (7) does not learn to do things like other children his/her age, (8) cannot speak or cannot be understood in words, (9) appears mentally backward, dull or slow	Total number of children aged 2-9 surveyed



FORM-A: HOUSEHOLD

H1. Identification		ENGLISH
#	Question	Options
HH-A	Province Name & Code _____	☐
HH-B	District Name & Code _____	☐☐
HH1	Cluster Name & Number ☐☐	HH-C Stratum [Child < 3 = 1/Other = 2] ☐
HH2	HH No.	☐☐☐
HH3	Interviewer's Name & No. _____	☐☐☐
HH4	Supervisor Name & No. _____	☐☐☐
HH5	Day/Month/Year of Interview	☐☐/☐☐/☐☐☐☐
HH6	Urban/Rural (Urban=1, Rural=2)	☐
HH7	Name of the Head of the HH (To be filled-in after completing Section H.2)	_____
HH8 to HH14 be filled-in after all questions for the HH have been completed		
HH8	Result of HH interview	Completed ..... 1 Not at home ..... 2 Refused ..... 3 HH not found/destroyed ..... 4 Other (specify_____) .. 6
HH9	Respondent to HH Form: Name: _____	Line No.: ☐☐
HH10	Total No. of HH members	☐☐
HH11	No. of women 15-49 eligible ☐☐	HH12 No. of women 15-49 forms completed ☐☐
HH13	No. of children < 5 eligible ☐☐	HH14 No. of children < 5 forms completed ☐☐
HH16	Editor: Name and Code _____ ☐☐☐	HH17 Data Entry: Name and Code _____ ☐☐

Introduction/Consent

HELLO. MY NAME IS (.....) AND I AM WORKING WITH THE KENYA NATIONAL BUREAU OF STATISTICS (KNBS), NAIROBI. WE ARE DOING A SURVEY TO COLLECT INFORMATION ABOUT FAMILY HEALTH AND EDUCATION, FOCUSING ON CHILDREN AND WOMEN, WITH UNICEF SUPPORT. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND EVENTUALLY BE ANONYMOUS. DURING THIS TIME I WOULD LIKE TO SPEAK WITH THE HOUSEHOLD HEAD AND MOTHER OR OTHERS WHO TAKE CARE OF CHILDREN IN THE HOUSEHOLD.

THE INFORMATION YOU PROVIDE WILL HELP THE GOVERNMENT AND DEVELOPMENT AGENCIES IN PLANNING AND IMPLEMENTING DEVELOPMENTAL PROGRAMS.

MAY I START THE INTERVIEW NOW?

H.2: HH Member Listing — HL

List the head of the HH in line 01. List all HH members (HL2), their relationship to the HH head (HL3), and their sex (HL4)
Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW? THESE MAY INCLUDE CHILDREN IN SCHOOL OR AT WORK. If yes, complete listing.

Then, ask questions starting with HL5 for each person at a time. Add a continuation sheet if there is more than 15 members. Tick here if continuation sheet used ☐

					Eligible for :			If age 18-59	For children age 0-17 year ask HL9 to HL12A						
					Women Interview	Child Labor	Under-5 Interview								
HL1 LINE NO.	**HL2** FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES IN THIS HOUSEHOLD, STARTING WITH THE HEAD OF THE HH?	**HL3** WHAT IS THE RELATION-SHIP OF (name) TO THE HEAD OF THE HH?	**HL4** IS (name) MALE OR FEMALE? 1 MALE 2 FEMALE	**HL5** HOW OLD IS (name)? HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY? [record in completed years] 98=DK*	**HL6** [Circle line no. if woman is age 15-49]	**HL7** [For child age 5-14 years] WHO IS THE MOTHER OR PRIMARY CARETAKER OF (name)? [record line no. of mother/ caretaker]	**HL8** [For child < 5] WHO IS THE MOTHER OR PRIMARY CARETAKER OF (name)? [record line no. of mother/ caretaker]	**HL8A** HAS (name) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	**HL9** IS (name's) NATURAL MOTHER ALIVE? 1-YES **2 - NO ⇘ HL11** **8 - DK ⇘ HL11**	**HL10** [If alive:] DOES (name's) NATURAL MOTHER LIVE IN THIS HH? [Record line no. of mother or 00 for 'no']	**HL10A** [If '00' in HL10] HAS (name's) MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS	**HL11** IS (name's) NATURAL FATHER ALIVE? 1 YES **2 - NO ⇘ NEXT LINE** **8 - DK ⇘ NEXT LINE**	**HL12** [If alive:] DOES (name's) NATURAL FATHER LIVE IN THIS HH? [Record line no. of father or 00 for 'no']	**HL12A** [If '00' in HL12] HAS (name's) FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS
Line	Name	Relation	M F	Age	15-49	Mother/CT	Mother/CT	Y N DK	Y N DK	Mother	Y N DK	Y N DK	Father	Y N DK
01		**0 1**	1 2	☐☐	01	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
02		☐☐	1 2	☐☐	02	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
03		☐☐	1 2	☐☐	03	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
04		☐☐	1 2	☐☐	04	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
05		☐☐	1 2	☐☐	05	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
06		☐☐	1 2	☐☐	06	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
07		☐☐	1 2	☐☐	07	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
08		☐☐	1 2	☐☐	08	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8
09		☐☐	1 2	☐☐	09	☐☐	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8	1 **2** **8**	☐☐	1 2 8

					Eligible for :			If age 18-59	For children age 0-17 year ask HL9 to HL12A					
HL1 LINE NO.	HL2 FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES IN THIS HOUSEHOLD, STARTING WITH THE HEAD OF THE HH?	HL3 WHAT IS THE RELATION-SHIP OF (name) TO THE HEAD OF THE HH?	HL4 IS (name) MALE OR FEMALE? 1 MALE 2 FEMALE	HL5 HOW OLD IS (name)? HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY? [record in completed years] 98=DK*	HL6 [Circle line no. if woman is age 15-49]	HL7 [For child age 5-14 years] WHO IS THE MOTHER OR PRIMARY CARETAKER OF (name)? [record line no. of mother/ caretaker]	HL8 [For child < 5] WHO IS THE MOTHER OR PRIMARY CARETAKER OF (name)? [record line no. of mother/ caretaker]	HL8A HAS (name) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	HL9 IS (name's) NATURAL MOTHER ALIVE? 1-YES 2 - NO ⇨ HL11 8 - DK ⇨ HL11	HL10 [If alive:] DOES (name's) NATURAL MOTHER LIVE IN THIS HH? [Record line no. of mother or 00 for 'no']	HL10A [If '00' in HL10] HAS (name's) MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS	HL11 IS (name's) NATURAL FATHER ALIVE? 1 YES 2 - NO ⇨ NEXT LINE 8 - DK ⇨ NEXT LINE	HL12 [If alive:] DOES (name's) NATURAL FATHER LIVE IN THIS HH? [Record line no. of father or 00 for 'no']	HL12A [If '00' in HL12] HAS (name's) FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS
Line	Name	Relation	M F	Age	15-49	Mother/CT	Mother/CT	Y N DK	Y N DK	Mother	Y N DK	Y N DK	Father	Y N DK
10		☐☐	1 2	☐☐	10	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
11		☐☐	1 2	☐☐	11	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
12		☐☐	1 2	☐☐	12	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
13		☐☐	1 2	☐☐	13	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
14		☐☐	1 2	☐☐	14	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
15		☐☐	1 2	☐☐	15	☐☐	☐☐	1 2 8	1 2 8	☐☐	1 2 8	1 2 8	☐☐	1 2 8
ARE THERE ANY OTHER PERSONS LIVING HERE - EVEN IF THEY ARE NOT MEMBERS OF YOUR FAMILY OR DO NOT HAVE PARENTS LIVING IN THIS HH? INCLUDING CHILDREN AT SCHOOL OR WORK? [If yes, insert child's name and complete the information. Fill in the totals below:]														
*HL5: Ascertain age for all persons below 60 years; Code '00' for children below 1 year and '97' for 97+ years.					Women 15-49	Children 5-14	Children under 5	Very sick (1)	Mother dead (2)		Mother sick (1)	Father dead (2)		Father sick (1)
TOTALS					☐☐	☐☐	☐☐	☐☐	☐☐		☐☐	☐☐		☐☐

Codes for HL3 : Relationship to the Head of HH:

01 - Head
02 - Wife or Husband
03 - Son or Daughter
04 - Son-in-law or daughter-in-law
05 - Grand child
06 - Parent
07 - Parent-in-law
08 - Brother or Sister
09 - Brother-in-law or sister-in-law
10 - Uncle/Aunt
11 - Niece/Nephew by blood
12 - Niece/Nephew by marriage
13 - Other relative
14 - Adopted/Foster/Step child
15 - Not related
98 - Don't know

H.3: Education (For all age 5 and above) ED

For members age 5 and above							Members age 5-24 years only								
ED1 Line No.	ED1A Name	ED1B How old Is (name)? How old was (name) on his/her last birthday? [Record completed years]	ED2 HAS (name) EVER ATTENDED SCHOOL OR PRE-SCHOOL? 1 Yes **2 No ⇨ Next Line**		ED3 WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) ATTENDED? WHAT IS THE HIGHEST CLASS (name) COMPLETED AT THIS LEVEL? If < 1 grade, enter 00		ED4 DURING THIS (2008) SCHOOL YEAR, DID (name) ATTEND SCHOOL OR PRE-SCHOOL ANY TIME? 1 Yes **2 No ⇨ED7**		ED5 SINCE LAST (DAY OF THE WEEK), HOW MANY DAYS DID (name) ATTEND SCHOOL? [Record no. of days]	ED6 DURING THIS SCHOOL YEAR 2008, WHICH LEVEL AND CLASS IS (name) ATTENDING?		ED7 DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME DURING THE PREVIOUS SCHOOL YEAR 2007? 1 Yes **2 No ⇨ Next Line** **8 DK ⇨Next Line**			ED8 DURING THAT PREVIOUS SCHOOL YEAR 2007, WHICH LEVEL AND CLASS DID (name) ATTENDED?	
Line	Name	Age	Y	N	Level	Grade	Y	N	Days	Level	Grade	Y	N	DK	Level	Grade
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐
			1	**2**	☐	☐☐	1	**2**	☐	☐	☐☐	1	**2**	**8**	☐	☐☐

CODES FOR ED3, ED6 & ED8

0 - Pre-School
1 - Primary
2 - Post-Primary, Vocational
3 - Secondary, 'A' Level
4 - College – Middle Level
5 - University
6 - Non-standard curriculum
8 – Don't know

H.4: Water & Sanitation — WS

#	Question	Options	Skip
WS1	WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	**Piped water** **Piped into dwelling** ..... **11** **Piped into yard or plot** ..... **12** **Public tap/standpipe** ..... **13** **Pipe water from neighbour's house** ..... **14** **Tubewell/borehole with hand-pump** ..... **21** **Tubewell/borehole with powered pump** ..... **22** **Dug well** **Protected well** ..... **31** **Unprotected well** ..... **32** **Water from spring** **Protected spring** ..... **41** **Unprotected spring** ..... **42** **Rainwater collection** ..... **51** **Tanker-truck** ..... **61** **Cart with small tank/drum** ..... **71** **Surface water (river, stream, dam, lake, pond, canal, irrigation channel)** ..... **81** Bottled water ..... 91 Other (*specify*_____) 96	11⇨WS5 12⇨WS5 13-81 ⇨WS3 96⇨WS3
WS2	WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?	Piped water Piped into dwelling ..... 11 Piped into yard or plot ..... 12 Public tap/standpipe ..... 13 Pipe water from neighbour's house ..... 14 Tubewell/borehole with hand-pump ..... 21 Tubewell/borehole with powered pump ..... 22 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (*specify*_____) 96	11⇨WS5 12⇨WS5
WS3	HOW LONG DOES IT TAKE TO GO THERE, GET WATER AND COME BACK? [Code '900' for over 15+ hours]	No. of minutes ..... ☐☐☐ **Water on premises** ..... **995** Don't know 998	995⇨WS4A
WS4	WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HH? **Probe:** IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (15+ years) ..... A Adult man (15+ years) ..... B Female child (under 15) ..... C Male child (under 15) ..... D Don't know ..... Z	

H.4: Water & Sanitation — WS

#	Question	Options	Skip
WS4A	WHAT IS THE MAIN TYPE OF CONTAINER USED FOR STORING DRINKING WATER IN THIS HOUSEHOLD?	Jerry can/Narrow neck container with lid ... 1 Jerry can/Narrow neck container without lid ... 2 Open container with lid ... 3 Open container without lid ... 4 Others (specify_____) ... 6	
WS4B	DURING THE LAST 12 MONTHS, DOES THIS HOUSEHOLD RECEIVE ANY CANS/CONTAINER THROUGH FREE DISTRIBUTION?	Yes ... 1 No ... 2 Don't know ... 8	
WS5	DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK?	Yes ... 1 **No ... 2** **Don't know ... 8**	 2⇨WS7 8⇨WS7
WS6	WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFER TO DRINK? ANYTHING ELSE? *[Record all items mentioned]*	Boil ... A Add bleach/chlorine ... B Strain it through a cloth ... C Use water filter (ceramic, sand, composite, etc.) ... D Solar dis-infection ... E Let it stand and settle ... F Other (*specify*_____) ... X Don't know ... Z	
WS7	WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? **If "flush" or "pour flush":** WHERE DOES IT FLUSH TO? **[Ask for permission & observe the facility]**	Flush / pour flush Flush to piped sewer system ... 11 Flush to septic tank ... 12 Flush to pit (latrine) ... 13 Flush to somewhere else ... 14 Flush to unknown place/not sure/DK where to flush ... 15 Pit latrine Ventilated Improved Pit latrine ... 21 Pit latrine with slab ... 22 Pit latrine without slab/open pit ... 23 Pit latrine with slab & cover ... 24 Pit latrine with slab & foot rest ... 25 Pit latrine with slab, cover & foot rest ... 26 Composting toilet ... 31 Bucket ... 41 Hanging toilet/hanging latrine ... 51 **No facilities or bush or field ... 95** Other (*specify*)_____ 96	 95⇨ WS11
WS8	DO YOU SHARE THIS FACILITY WITH OTHER HHS?	Yes ... 1 **No ... 2**	 2⇨ WS10
WS9	HOW MANY HHS IN TOTAL USE THIS TOILET FACILITY?	No. of HHs (if less than 10) ... ☐ Ten or more HHs ... 10 DK ... 98	

H.4: Water & Sanitation			WS
#	Question	Options	Skip
WS10	DO YOU HAVE A HAND-WASHING FACILITY OUTSIDE THE TOILET? **[Ask for permission & observe the facility]**	Seen the facility filled with water ..... 1 Seen the facility but no water ..... 2 Not seen ..... 3 No facility 4	
WS11	HOW DO MEMBERS OF YOUR HOUSEHOLD MAINLY GET RID OF THE GARBAGE (RUBBISH)?	Dumped in street/empty plot ..... 01 Garbage burnt ..... 02 Garbage buried ..... 03 Thrown in pit ..... 04 Composted ..... 05 Community disposal point ..... 06 Regular collection by government ..... 07 Infrequent collection by government ..... 08 Pays for private collection ..... 09 Other (specify_____) 96	

H.5: Household Characteristics — HC

#	Question	Options	Skip
HC1.A	WHAT IS THE RELIGION OF THE HEAD OF THIS HH?	Catholic ..... 1 Other Christian ..... 2 Muslim ..... 3 No Religion ..... 8 Others (specify) 9	
HC1.B	WHAT IS THE MOTHER TONGUE/NATIVE LANGUAGE OF THE HEAD OF THIS HOUSEHOLD?	Kiswahili ..... 01 Embu ..... 02 Kalenjin ..... 03 Kamba ..... 04 Kikuyu ..... 05 Kisii ..... 06 Luhya ..... 07 Luo ..... 08 Maasai ..... 09 Meru ..... 10 Mijikenda ..... 11 Somali ..... 12 Other (specify_____) 96	
HC2	HOW MANY ROOMS IN THIS HH ARE USED FOR SLEEPING?	No. of rooms ..... ☐☐	
HC3	**Observe and record:** Main material of the dwelling **floor**:	Natural floor Earth/sand ..... 11 Dung ..... 12 Rudimentary floor Wood planks ..... 21 Palm/bamboo ..... 22 Finished floor Parquet or polished wood ..... 31 Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet ..... 35 Other *(specify*_____) .. 96	
HC4	**Observe and record:** Main material of the **roof**:	Natural roofing No Roof ..... 11 Thatch/palm leaf ..... 12 Sod ..... 13 Rudimentary Roofing Rustic mat ..... 21 Palm/bamboo ..... 22 Wood planks ..... 23 Finished roofing Metal ..... 31 Wood ..... 32 Calamine/cement fiber ..... 33 Ceramic tiles ..... 34 Cement ..... 35 Roofing shingles ..... 36 Other *(specify*_____) 96	

H.5: Household Characteristics — HC

#	Question	Options	Skip
HC5	**Observe and record:** Main material of the **walls**:	Natural walls No walls ..... 11 Cane/palm/trunks ..... 12 Mud/dirt ..... 13 Rudimentary walls Bamboo with mud ..... 21 Stone with mud ..... 22 Uncovered adobe ..... 23 Plywood ..... 24 Carton ..... 25 Reused wood ..... 26 Finished walls Cement ..... 31 Stone with lime/cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Covered adobe ..... 35 Wood planks/shingles ..... 36 Other (*specify*_____) 96	
HC6	WHAT TYPE OF FUEL DOES YOUR HH MAINLY USE FOR COOKING?	**Electricity** ..... **01** **Liquid Propane Gas (LPG)** ..... **02** **Natural gas** ..... **03** **Biogas** ..... **04** Kerosene ..... 05 Coal / Lignite ..... 06 Charcoal ..... 07 Wood ..... 08 Straw/shrubs/grass ..... 09 Animal dung ..... 10 Agricultural crop residue ..... 11 Other (*specify*_____) 96	01 ⇨ HC8 02 ⇨ HC8 03 ⇨ HC8 04 ⇨ HC8
HC7	IN THIS HH, IS FOOD COOKED ON AN OPEN FIRE, AN OPEN STOVE OR A CLOSED STOVE? **Probe for type**	Open fire ..... 1 Open stove ..... 2 **Closed stove** ..... **3** **Other (*specify*_____) 6**	 3 ⇨ HC8 6 ⇨ HC8
HC7A	DOES THE FIRE/STOVE HAVE A CHIMNEY OR A HOOD?	Yes ..... 1 No 2	
HC8	IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING OR OUTDOORS?	In the house ..... 1 In a separate building ..... 2 Outdoors ..... 3 Other (*specify*_____) .. 6	

H.5: Household Characteristics — HC

#	Question	Options		Skip
HC9	DOES YOUR HOUSEHOLD HAVE	Yes	No	
	A. ELECTRICITY?	1	2	
	B. RADIO?	1	2	
	C. TELEVISION?	1	2	
	D. MOBILE TELEPHONE?	1	2	
	E. TELEPHONE (LAND LINE)?	1	2	
	F. REFRIGERATOR?	1	2	
	G. COMPUTER?	1	2	
	H. INTERNET CONNECTION?	1	2	
HC10	DOES ANY MEMBER OF YOUR HH OWN:			
	A. WATCH?	1	2	
	B. BICYCLE?	1	2	
	C. MOTORCYCLE OR SCOOTER?	1	2	
	D. AN ANIMAL DRAWN CART?	1	2	
	E. A CAR OR TRUCK?	1	2	
	F. A BOAT WITH A MOTOR?	1	2	
HC11	DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes ..... 1 No 2		
HC12	DOES THIS HH OWN ANY LIVESTOCK, HERDS, OR FARM ANIMALS?	Yes ..... 1 No 2		

H.6: Use of Mosquito Net — TN

#	Question	Options		Skip
TN1	DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?	Yes ..... 1 No 2		2⇨(H.7)
TN2	HOW MANY MOSQUITO NETS DOES YOUR HH HAVE? [If 7 or more nets, record '7']	Number of nets ..... ☐		
	Ask the respondent to show you the nets in the household, if more than 2, tell them to show the two recently obtained ones.	**Most Recent [Net #1]**	**Last But One [Net #2]**	
TN3	MAY I HAVE A LOOK AT THE TWO NET(S) YOU HAVE OBTAINED LAST, TO ESTABLISH THE BRAND?	Observed ..... 1 Not observed 2	Observed ..... 1 Not observed 2	
TN4	HOW MANY MONTHS AGO DID YOUR HOUSEHOLD ACQUIRE THE LAST/LAST BUT ONE MOSQUITO NET? *[If answer is "12 months" or "1 year", probe to determine if net was obtained exactly 12 months ago or earlier or later.]*	No of Months ..... ☐☐ More than 3 years ..... 95 Don't know/not sure 98	No of Months ..... ☐☐ More than 3 years ..... 95 Don't know/not sure 98	
TN5	***Observe the brand/type*** *of mosquito net.* *If not observed ask:* WHAT BRAND IS THE NET?	Long lasting nets **Permanet ..... 1 ⇨ TN8** **Olyset ..... 2 ⇨ TN8** Other nets Supanet ..... 3 Other(sp_____) ..... 8 Don't know 9	Long lasting nets **Permanet ..... 1 ⇨ TN8** **Olyset ..... 2 ⇨ TN8** Other nets Supanet ..... 3 Other(sp_____) ..... 8 Don't know 9	
TN6	SINCE YOU GOT THIS MOSQUITO NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL OR REPEL MOSQUITOS?	Yes ..... 1 **No ..... 2 ⇨ TN8** **Don't know ..... 9 ⇨ TN8**	Yes ..... 1 **No ..... 2 ⇨ TN8** **Don't know ..... 9 ⇨ TN8**	
TN7	HOW MANY MONTHS AGO WAS THIS NET LAST DIPPED OR SOAKED? *[If answer is "12 months" or "1 year", probe to determine if net was dipped or soaked exactly 12 months ago or earlier or later.]*	No of Months ..... ☐☐ More than 2 years ..... 95 Don't know/not sure 98	No of Months ..... ☐☐ More than 2 years ..... 95 Don't know/not sure 98	
TN8	DID ANYONE SLEPT UNDER THIS MOSQUITO NET LAST NIGHT? **If 'yes',** WHO SLEPT UNDER THIS NET LAST NIGHT? ANY ONE ELSE? *[Record the person's line number from the household schedule]* *[If more than 4 persons slept under a net, record the details of children and women first]* *[If guest, code '77' and none, code '00']*	**Name** **Line No** 1 ..... ☐☐ 2 ..... ☐☐ 3 ..... ☐☐ 4 ..... ☐☐	**Name** **Line No** 1 ..... ☐☐ 2 ..... ☐☐ 3 ..... ☐☐ 4 ..... ☐☐	

H.7: Orphan-hood/Vulnerability			OV
#	Question	Options	SKIP
OV1	**Check HL5 (in section H.2): Any children 0-17?** ☐ **Yes ⇨ Continue to OV2** ☐ **No ⇨ Next Section [H.10]**		
OV2	I WOULD LIKE YOU TO THINK BACK OVER THE PAST 12 MONTHS. HAS ANY USUAL MEMBER OF YOUR HH DIED IN THE LAST 12 MONTHS?	Yes ..... 1 **No 2**	2⇨OV5
OV3	(OF THOSE WHO DIED IN THE PAST 12 MONTHS) WERE ANY OF THESE PEOPLE BETWEEN THE AGES OF 18 AND 59 YEARS?	Yes ..... 1 **No 2**	2⇨OV5
OV4	(OF THOSE WHO DIED IN THE PAST 12 MONTHS AND WERE BETWEEN THE AGES OF 18 AND 59 YRS.) WERE ANY OF THESE PEOPLE SERIOUSLY ILL FOR 3 OF THE 12 MONTHS BEFORE HE/SHE DIED?	**Yes ..... 1** No 2	1⇨OV8
OV5	**Check the following in the HH Listing** **1. Check totals for HL9 and HL11** ☐ **At least one mother or father dead ⇨ OV8** ☐ **No mother or father dead** **2. Check total for HL8A** ☐ **At least one adult aged 18-59 very sick 3 of last 12 months ⇨ OV8** ☐ **No adult aged 18-59 very sick 3 of last 12 months** **3. Check totals for HL10A and HL12A** ☐ **At least one mother or father ill 3 of last 12 months ⇨ OV8** ☐ **No mother or father ill 3 of last 12 months ⇨ Go to Section H.8**		

H.7: Orphan-hood — OV

		1ST CHILD	2ND CHILD	3RD CHILD	4TH CHILD
OV8	List all children aged 0-17 Years. Record names, line numbers and ages of all children, beginning with the first child and continue in order in which listed in the HH Listing section. Use a continuation sheet if there are more than 4 children aged 0-17 years. Ask all questions for one child before moving to the next child.				
	Name (from HL2)	.....	.....	.....	.....
	Line number (from HL1)	___ ___	___ ___	___ ___	___ ___
	Age (from HL5)	___ ___	___ ___	___ ___	___ ___
OV9	I WOULD LIKE TO ASK YOU ABOUT ANY FORMAL, ORGANIZED HELP OR SUPPORT THAT YOUR HH MAY HAVE RECEIVED FOR (name) AND FOR WHICH YOU DID NOT HAVE TO PAY. BY FORMAL ORGANIZED SUPPORT I MEAN HELP PROVIDED BY SOMEONE WORKING FOR A PROGRAM. THIS PROGRAM COULD BE GOVERNMENT, PRIVATE, RELIGIOUS, CHARITY, OR COMMUNITY-BASED. REMEMBER THIS SHOULD BE SUPPORT FOR WHICH YOU DID NOT PAY.				
OV10	NOW I WOULD LIKE TO ASK YOU ABOUT THE SUPPORT YOUR HH RECEIVED FOR (name). IN THE LAST 12 MONTHS, HAS YOUR HH RECEIVED ANY MEDICAL SUPPORT FOR (name), SUCH AS MEDICAL CARE, SUPPLIES OR MEDICINE?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8
OV11	IN THE LAST 12 MONTHS, HAS YOUR HH RECEIVED ANY EMOTIONAL OR PSYCHOLOGICAL SUPPORT FOR (name), SUCH AS COMPANIONSHIP, COUNSELING FROM A TRAINED COUNSELOR, OR SPIRITUAL SUPPORT, WHICH YOU RECEIVED AT HOME?	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV13**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV13**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV13**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV13**
OV12	DID YOUR HH RECEIVE ANY OF THIS SUPPORT FOR (name), IN THE PAST 3 MONTHS?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8
OV13	IN THE LAST 12 MONTHS, HAS YOUR HH RECEIVED ANY MATERIAL SUPPORT FOR (name), SUCH AS CLOTHING, FOOD OR FINANCIAL SUPPORT?	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV15**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV15**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV15**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV15**
OV14	DID YOUR HH RECEIVE ANY OF THIS SUPPORT FOR (name), IN THE PAST 3 MONTHS?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8
OV15	IN THE LAST 12 MONTHS, HAS YOUR HH RECEIVED ANY SOCIAL SUPPORT FOR (name), SUCH AS HELP IN HH WORK, TRAINING FOR A CAREGIVER, OR LEGAL SERVICES?	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV17**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV17**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV17**	Yes ..... 1 **No ..... 2** **DK ..... 8** **2 or 8 ⇨ OV17**
OV16	DID YOUR HH RECEIVE ANY OF THIS SUPPORT FOR (name), IN THE PAST 3 MONTHS?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8
OV17	**Check OV8: Age of the child 5-17 Yr?**	☐ **Yes ⇨ OV18** ☐ **No ⇨ Next child**	☐ **Yes ⇨ OV18** ☐ **No ⇨ Next child**	☐ **Yes ⇨ OV18** ☐ **No ⇨ Next child**	☐ **Yes ⇨ OV18** ☐ **No ⇨ Next child**
OV18	IN THE LAST 12 MONTHS, HAS YOUR HH RECEIVED ANY SUPPORT FOR (name's) SCHOOLING, SUCH AS ALLOWANCE, FREE ADMISSION, BOOKS OR SUPPLIES?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8

H.8: Child Labour (for 5-14 years of age only) CL

To be administered to mother/caretaker of each child in the HH age 5 through 14 years.

NOW, I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HH MAY DO.

CL1 Line no.	CL2 Name	CL3 DURING THE PAST WEEK, DID *(name)* DO ANY KIND OF WORK FOR SOMEONE, WHO IS NOT A MEMBER OF THIS HH? **If Yes:** FOR PAY IN CASH OR KIND? 1=Yes, for pay (cash or kind) 2=Yes, unpaid **3=No ⇨ CL5**			CL4 SINCE LAST *(day of the week)*, ABOUT HOW MANY HOURS DID *(name)* DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HH? *[If more than one job, include all hours at all jobs]* **Record & skip to ⇨ CL6**	CL5 AT ANY TIME DURING THE PAST YEAR, DID *(name)* DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HH? **If Yes:** FOR PAY IN CASH OR KIND? 1=Yes, for pay (cash or kind) 2=Yes, unpaid 3=No			CL6 DURING THE PAST WEEK, DID *(name)* HELP WITH HH CHORES SUCH AS SHOPPING, COLLECTING FIREWOOD, CLEANING, FETCHING WATER OR CARING FOR CHILDREN? 1= Yes **2= No ⇨ CL8**		CL7 SINCE LAST *(day of the week)*, ABOUT HOW MANY HOURS DID *(name)* SPEND DOING THESE CHORES?	CL8 DURING THE PAST WEEK, DID *(name)* DO ANY OTHER FAMILY WORK (ON THE FARM OR IN A BUSINESS OR SELLING GOODS IN THE STREET?) 1=Yes **2=No ⇨Next Line**		CL9 SINCE LAST *(day of the week)*, ABOUT HOW MANY HOURS DID *(name)* DO THIS WORK?
Line No.	Name	Yes		No	No. of hours	Yes		No	Yes	No	No. of hours	Yes	No	No. of hours
		Paid	Unpaid			Paid	Unpaid							
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐
		1	2	**3**	☐☐	1	2	3	1	**2**	☐☐	1	**2**	☐☐

H.9: Child Discipline CD

Review the household listing and list all children aged 2-14 years below in order according to their line number (HL1). Do not include other HH members outside of the age range 2-14 years. Record the line number, [name, sex, age, and the line number of the mother or caretaker] for each child. Then record the total number of children aged 2-14 in the box provided (CD7). {write the name, sex, age and the mother/caretaker line no. only for the eligible child}

CD1 Rank	CD2 Line No. from HL1	CD3 Name from HL2	CD4 Sex from HL4 M	CD4 F	CD5 Age from HL5	CD6 Line no. of mother/ caretaker from HL7/HL8	CD7
01	__ __		1	2	__ __	__ __	
02	__ __		1	2	__ __	__ __	
03	__ __		1	2	__ __	__ __	
04	__ __		1	2	__ __	__ __	
05	__ __		1	2	__ __	__ __	
06	__ __		1	2	__ __	__ __	
07	__ __		1	2	__ __	__ __	
08	__ __		1	2	__ __	__ __	
	Total children aged 2-14 years in the HH						__ __

If there is only one child age 2-14 years in the household, then go to CD11 to administer child discipline questions.

Random Selection Of Child

Use the grid below to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household. Look for the last digit of the household number from the cover page. This is the number of the row you should go to in the table below. Check the total number of eligible children (2-14) in CD7 above. This is the number of the column you should go to. Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child about whom the questions will be asked. Record the rank number in CD9 below. Finally, record the line number and name of the selected child in CD11 on the next page. Then, find the mother or primary caretaker of that child, and ask the questions, beginning with CD12.

CD8	Number of Eligible Children in the Household							
Last digit of HH. No.	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD9	Record the rank number of the child.....	__ __

H.9: Child Discipline CD

Review the household listing and list all children aged 2-14 years below in order according to their line number (HL1). Do not include other HH members outside of the age range 2-14 years. Record the line number, [name, sex, age, and the line number of the mother or caretaker] for each child. Then record the total number of children aged 2-14 in the box provided (CD7). (write the name, sex, age and the mother/caretaker line no. only for the eligible child)

CD1 Rank	CD2 Line No. from HL1	CD3 Name from HL2	CD4 Sex from HL4 M F	CD5 Age from HL5	CD6 Line no. of mother/ caretaker from HL7/HL8	CD7
01	__ __		1 2	__ __	__ __	
02	__ __		1 2	__ __	__ __	
03	__ __		1 2	__ __	__ __	
04	__ __		1 2	__ __	__ __	
05	__ __		1 2	__ __	__ __	
06	__ __		1 2	__ __	__ __	
07	__ __		1 2	__ __	__ __	
08	__ __		1 2	__ __	__ __	
	Total children aged 2-14 years in the HH					__ __

If there is only one child age 2-14 years in the household, then go to CD11 to administer child discipline questions.

Random Selection Of Child

Use the grid below to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household. Look for the last digit of the household number from the cover page. This is the number of the row you should go to in the table below. Check the total number of eligible children (2-14) in CD7 above. This is the number of the column you should go to. Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child about whom the questions will be asked. Record the rank number in CD9 below. Finally, record the line number and name of the selected child in CD11 on the next page. Then, find the mother or primary caretaker of that child, and ask the questions, beginning with CD12.

CD8	Number of Eligible Children in the Household							
Last digit of HH. No.	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5
CD9	Record the rank number of the child.....							__ __

H.9: Child Discipline — CD

Identify eligible child aged 2-14 in the household using the tables on the preceding page.
Request and interview the mother or primary caretaker of the selected child (identified by the line number in CD6).

#	Question	Options	Skip
CD11	Write name and line no. of the child selected for the module from CD3 and CD2, based on the rank number in CD9.	Name & Line No.: ☐☐	
CD12	ALL ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF *YOU OR ANYONE ELSE IN YOUR HOUSEHOLD* HAS USED THIS METHOD WITH *(name)* IN THE PAST MONTH.		
CD12a	TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE).	Yes ..... 1 No 2	
CD12b	EXPLAINED WHY SOMETHING (THE BEHAVIOR) WAS WRONG.	Yes ..... 1 No 2	
CD12c	SHOOK HIM/HER.	Yes ..... 1 No 2	
CD12d	SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes ..... 1 No 2	
CD12e	GAVE HIM/HER SOMETHING ELSE TO DO.	Yes ..... 1 No 2	
CD12f	SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes ..... 1 No 2	
CD12g	HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes ..... 1 No 2	
CD12h	CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes ..... 1 No 2	
CD12i	HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes ..... 1 No 2	
CD12j	HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes ..... 1 No 2	
CD12k	BEAT HIM/HER UP WITH AN IMPLEMENT (HIT OVER AND OVER AS HARD AS ONE COULD).	Yes ..... 1 No 2	
CD12l	PINCH HIM/HER.	Yes ..... 1 No 2	
CD13	DO YOU BELIEVE THAT IN ORDER TO BRING UP (RAISE, EDUCATE) *(name)* PROPERLY, YOU NEED TO PHYSICALLY PUNISH HIM/HER?	Yes ..... 1 No ..... 2 Don't know/no opinion 8	

H.10: Food Relief — FR

#	Question	Options	Skip
FR1	ARE YOU REGISTERED AS A BENEFICIARY OF FOOD DISTRIBUTION PROGRAM?	Yes ..... 1 **No 2**	2⇨ FR6
FR2	HOW LONG AGO WAS THE LAST RATION?	No. of weeks ..... 1 ☐☐ No. of months ..... 2 ☐☐	
FR3	DOES THE FOOD AID MEET ALL THE FOOD NEEDS OF THE HOUSEHOLD?	Yes ..... 1 No ..... 2 Don't Know 8	
FR4	DO MEMBERS OF THE HOUSEHOLD SELL FOOD TO OBTAIN MONEY TO MEET OTHER NEEDS?	Yes ..... 1 **No ..... 2** **Don't Know 8**	2⇨ FR6 8⇨ FR6
FR5	DOES THE PRICE THE HOUSEHOLD RECEIVE FOR THIS FOOD EQUAL MARKET RATES?	Much Less ..... 1 Roughly the Same ..... 2 Much More ..... 3 Don't Know 8	
FR6	IS ANY OF YOUR CHILDREN REGISTERED IN THE CHILD FEEDING PROGRAM?	Yes ..... 1 No 2	
FR7	HAS THE HOUSEHOLD BEEN DISPLACED ANY TIME DURING THE PAST 12 MONTHS?	Yes ..... 1 No 2	

H.11: Salt Iodization — SI

#	Question	Options	Skip
SL1	WE WOULD LIKE TO CHECK WHETHER THE SALT USED IN YOUR HH IS IODIZED. MAY I SEE A SAMPLE OF THE SALT USED TO COOK THE MAIN MEAL EATEN BY MEMBERS OF YOUR HH LAST NIGHT? [Once you have examined the salt, circle number that corresponds to test outcome]	Not iodized ..... 1 **Less than 15 ppm** ..... 2 **15 ppm and more** ..... 3 **No salt at home** ..... 6 **Salt not tested** 7	 2⇨ SL2 3⇨ SL2 3⇨ SL2 3⇨ SL2
SL1A	TYPE OF SALT	Crystal ..... 1 Powder ..... 2 Other (Specify_____) 9	
SL2	**Check HL6: Does any eligible woman age 15-49 in the HH? You should have a Form with the Woman ID filled in for each eligible woman.** ☐ **Yes ⇨ Go to WOMAN 15-49 FORM to administer the questions to the first eligible woman.** ☐ **No ⇨ Continue to SL3.**		
SL3	**Check HL8: Does any child under the age of 5 in the HH? You should have a Form with the Under-Five ID filled in for each eligible child.** ☐ **Yes ⇨ Go to CHILD < 5 FORM to administer the Form to mother or caretaker of the first eligible child.** ☐ **No ⇨ End the interview by thanking the respondent for his/her cooperation.** **Gather together all Forms for this household and tally the number of Forms completed on the cover page.**		

Interviewer's Remarks:

Supervisor's Remarks:



FORM-B: WOMAN AGE 15-49 YEARS

W.1: Identification Panel		ENGLISH
This Form is to be administered to all women age 15-49 years (See Column HL6 in the HH Form). Fill in one Form for each eligible woman.		
WM-A	Province Name and Code:	☐
WM-B	District Name and Code:	☐☐
WM1	Cluster Name and Number	☐☐
WM-C	Stratum code: HH with child < 3 = 1 Other HHs = 2	☐
WM2	HH No.	☐☐☐
WM3	Name of the woman (from FORM-A: **HL2**)	_____
WM4	Line no. of woman (from FORM-A: **HL1**)	☐☐
WM5	Interviewer's Name & Code	☐☐☐
WM6	Day/Month/Year of interview	☐☐/☐☐/☐☐☐☐
WM7	Result of interview for woman	Completed ..... 1 Not at home ..... 2 Refused ..... 3 Partly completed ..... 4 Incapacitated ..... 5 Other *(Specify* _____ *)* 6
	Remarks if any:	

Read, if the respondent has not responded to any other Forms

Introduction/Consent

HELLO. MY NAME IS (.....) AND I AM WORKING WITH THE KENYA NATIONAL BUREAU OF STATISTICS (KNBS), NAIROBI. WE ARE DOING A SURVEY TO COLLECT INFORMATION ABOUT FAMILY HEALTH AND EDUCATION, FOCUSING ON CHILDREN AND WOMEN, WITH UNICEF SUPPORT. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND EVENTUALLY BE ANONYMOUS.

THE INFORMATION YOU PROVIDE WILL HELP THE GOVERNMENT AND DEVELOPMENT AGENCIES IN PLANNING AND IMPLEMENTING DEVELOPMENTAL PROGRAMS.

MAY I START THE INTERVIEW NOW?

ENGLISH

1. **The child is reading a book.**
2. **The rains came late this year.**
3. **Parents must care for their children.**
4. **Farming is hard work.**

KISWAHILI

1. **Mtoto anasoma kitabu.**
2. **Mvua ilichelewa mwaka huu.**
3. **Nilazima wazazi watunze watoto wao.**
4. **Ukilima ni kazi ngumu.**

W.2: Woman Information			WI
#	Question	Options	Skip
WM8	IN WHAT MONTH AND YEAR WERE YOU BORN? [Date of birth]	Month ☐☐ DK Month 98 Year ☐☐☐☐ DK Year 9998	
WM9	HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	Age in completed years ☐☐	
WM10	HAVE YOU EVER ATTENDED SCHOOL OR PRE-SCHOOL?	Yes 1 **No 2**	2⇨WM14
WM11	WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Pre-School 0 Primary 1 Post-Primary, Vocational 2 Secondary, 'A' Level 3 College – Middle Level 4 University 5 Non-standard curriculum 6	
WM12	WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL?	Grade ☐☐	
WM13	**Check WM11: Level of schooling** ☐ **Secondary/College/University (codes 3 or 4 or 5)** ⇨ **WM15** ☐ **Other** ⇨ **Continue to WM14**		
WM14	NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. [Show language test card to respondent]	Cannot read at all 1 Able to read only parts of sentence 2 Able to read whole sentence 3 No sentence in required language 4 (specify language_____) Blind/mute, visually/speech impaired 5	
WM15	HOW OFTEN DO YOU LISTEN TO RADIO?	Almost everyday 1 At least once a week 2 At least once a month 3 Rarely/Never 4	
WM16	HOW OFTEN DO YOU WATCH TELEVISION?	Almost everyday 1 At least once a week 2 At least once a month 3 Rarely/Never 4	
WM17	HOW OFTEN DO YOU READ NEWSPAPERS?	Almost everyday 1 At least once a week 2 At least once a month 3 Rarely/Never 4	

W.3: Child Mortality			CM
#	Question	Options	Skip
To be administered to all women age 15-49. All questions refer to LIVE births only.			
CM1	NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH? ***If "No" probe by asking:*** I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes ..... 1 **No** **2**	2⇨(W.6)
CM3	DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes ..... 1 **No** **2**	2⇨CM5
CM4	HOW MANY SONS LIVE WITH YOU? HOW MANY DAUGHTERS LIVE WITH YOU?	A. Sons at home ☐☐ B. Daughters at home ☐☐	
CM5	DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	Yes ..... 1 **No** **2**	2⇨CM7
CM6	HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU? HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?	A. Sons elsewhere ☐☐ B. Daughters elsewhere ☐☐	
CM7	HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED? **If "No" probe by asking:** ANY BABY WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE BUT DID NOT SURVIVE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes ..... 1 **No** **2**	2⇨CM9
CM8	HOW MANY BOYS HAVE DIED? HOW MANY GIRLS HAVE DIED?	A. Boys dead ☐☐ B. Girls dead ☐☐	
CM9	**Sum answers to** CM4, CM6, & CM8.	Sum ☐☐	
CM10	**JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL _____ BIRTHS DURING YOUR LIFE. IS THIS CORRECT?** ☐ **Yes** ⇨ **Continue to W.3a (next page).** ☐ **No** ⇨ **Check responses and make corrections before proceeding to W.3a**		

W.3a: Birth History — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL YOUR BIRTHS, WHETHER STILL ALIVE OR NOT, STARTING WITH THE FIRST ONE YOU HAD.
Record names of all the births in BH1. Record twins and triplets on separate lines.

BH1		BH2	BH3	BH4	BH5	BH6	BH7	BH8	BH9		BH10
#	WHAT NAME WAS GIVEN TO YOUR (FIRST/ NEXT) BABY?	WERE ANY OF THESE BIRTHS TWINS?	IS *(name)* A BOY OR GIRL?	IN WHAT MONTH AND YEAR WAS *(name)* BORN? **Probe:** WHAT IS HIS/HER BIRTHDAY?	IS *(name)* STILL ALIVE?	HOW OLD WAS *(name)* AT HIS/HER LAST BIRTHDAY? [Record age in completed years]	IS *(name)* LIVING WITH YOU?	Record HH line number of child [Record '00' if child not listed in HH]	*If dead:* HOW OLD WAS *(name)* WHEN HE/SHE DIED? HOW MANY MONTHS OLD WAS *(name)*? [Record days if less than 1 month; months if less than 2 years; or years]		WERE THERE ANY OTHER LIVE BIRTHS BETWEEN *(name of previous birth)* AND *(name)*?
01		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ next line**	Days ..... 1 Month ..... 2 Year 3	☐☐	
02		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
03		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
04		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
05		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
06		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
07		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
08		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** **⇨ BH9**	☐☐	Y .... 1 N 2	☐☐ **⇨ BH10**	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]

W.3a: Birth History — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL YOUR BIRTHS, WHETHER STILL ALIVE OR NOT, STARTING WITH THE FIRST ONE YOU HAD.
Record names of all the births in BH1. Record twins and triplets on separate lines.

BH1		BH2	BH3	BH4	BH5	BH6	BH7	BH8	BH9		BH10
#	WHAT NAME WAS GIVEN TO YOUR (FIRST/ NEXT) BABY?	WERE ANY OF THESE BIRTHS TWINS?	IS *(name)* A BOY OR GIRL?	IN WHAT MONTH AND YEAR WAS *(name)* BORN? **Probe:** WHAT IS HIS/HER BIRTHDAY?	IS *(name)* STILL ALIVE?	HOW OLD WAS *(name)* AT HIS/HER LAST BIRTHDAY? [Record age in completed years]	IS *(name)* LIVING WITH YOU?	Record HH line number of child [Record '00' if child not listed in HH]	*If dead:* HOW OLD WAS *(name)* WHEN HE/SHE DIED? HOW MANY MONTHS OLD WAS *(name)*? [Record days if less than 1 month; months if less than 2 years; or years]		WERE THERE ANY OTHER LIVE BIRTHS BETWEEN *(name of previous birth)* AND *(name)*?
09		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** ⇨ BH9	☐☐	Y .... 1 N 2	☐☐ ⇨ BH10	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
10		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** ⇨ BH9	☐☐	Y .... 1 N 2	☐☐ ⇨ BH10	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
11		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** ⇨ BH9	☐☐	Y .... 1 N 2	☐☐ ⇨ BH10	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]
12		Sing .. 1 Mult ... 2	Boy .... 1 Girl 2	Month ☐☐ Year ☐☐☐☐	Yes ... 1 **No..... 2** ⇨ BH9	☐☐	Y .... 1 N 2	☐☐ ⇨ BH10	Days ..... 1 Month ..... 2 Year 3	☐☐	Yes ..... 1 [Add] No ..... 2 [Next]

BH11	HAVE YOU HAD ANY LIVE BIRTHS SINCE THE BIRTH OF (name of last birth)? **If yes**, record birth(s)	Yes ..... 1 No 2	
BH12	**Compare CM9 with number of births in history above and mark:** ☐ **Numbers are different ⇨ Probe and reconcile** ☐ **Numbers are same** ⟹	**Check:** **For all birth:** Year of birth is recorded ..... ☐ **For each living child:** Current age is recorded ..... ☐ **For each dead child:** Age of death is recorded..... ☐ **For age at death 12 months or 1 year:** Probe to ..... ☐ determine exact number of months	



W.3a: Birth History			BH
BH13	SOME PREGNANCIES END BEFORE FULL TERM AS A MISCARRIAGE OR AN ABORTION, WHILE OTHERS MAY RESULT IN A STILLBIRTH. HAVE YOU HAD A MISCARRIAGE OR ABORTION?	Yes ..... 1 **No** **2**	2⇨ BH15
BH14	IN ALL HOW MANY PREGNANCIES DID YOU HAVE THAT ENDED IN A MISCARRIAGE OR AN ABORTION?	Miscarriages/abortions ..... ☐☐ DK 98	
BH15	HAVE YOU HAD A STILLBIRTH?	Yes ..... 1 **No** **2**	2⇨CM12
BH16	IN ALL HOW MANY PREGNANCIES DID YOU HAVE THAT ENDED IN A STILLBIRTH?	Still births ..... ☐☐ DK 98	
CM12	**Check BH4 of last birth: Did the woman's last birth occur within the last 2 years, that is, since (day and month of interview in 2006)? If child has died, take special care when referring to this child by name in the following sections.** ☐ **No live birth in last 2 years** ⇨ **MARRIAGE/UNION Section [W.6]** ☐ **Yes, live birth in last 2 years** ⇨ **Continue to CM13** **Name of child:**_____		
CM13	AT THE TIME YOU BECAME PREGNANT WITH (name), DID YOU WANT TO BECOME PREGNANT THEN, DID YOU WANT TO WAIT UNTIL LATER, OR DID YOU WANT NO (MORE) CHILDREN AT ALL?	Then ..... 1 Later ..... 2 No more 3	

W.4: Tetanus Toxoid — TT

#	Question	Options	Skip
This section is to be administered to all women with a live birth in the 2 years preceding the date of interview.			
TT1	DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? [If a card is presented, use it to assist with answers to the following questions]	Yes (card seen) ..... 1 Yes (card not seen) ..... 2 No ..... 3 DK 8	
TT2	WHEN YOU WERE PREGNANT WITH YOUR LAST CHILD, DID YOU RECEIVE ANY INJECTION TO PREVENT HIM OR HER FROM GETTING TETANUS, WHICH IS CONVULSIONS AFTER BIRTH (AN ANTI-TETANUS SHOT, AN INJECTION AT THE TOP OF THE ARM OR SHOULDER OR THIGH)?	Yes ..... 1 **No ..... 2** **DK 8**	2⇨TT5 8⇨TT5
TT3	HOW MANY TIMES DID YOU RECEIVE THIS ANTI-TETANUS INJECTION DURING YOUR LAST PREGNANCY?	No. of times ..... ☐☐ **DK 98**	98⇨TT5
TT4	***Check:* How many TT doses during last pregnancy were reported in TT3?**	**At least 2 TT inj. during last pregnancy ..... 1** Fewer than 2 TT inj. during last preg 2	**1⇨(W.5)**
TT5	DID YOU RECEIVE ANY TT INJECTION AT ANY TIME BEFORE YOUR LAST PREGNANCY?	Yes ..... 1 **No ..... 2** **DK 8**	**2⇨(W.5)** **8⇨(W.5)**
TT6	HOW MANY TIMES DID YOU RECEIVE IT?	No. of times ..... ☐☐	
TT7	IN WHAT MONTH AND YEAR DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY? Skip to next section only if year of injection is given. Otherwise, continue with TT8.	Month ..... ☐☐ DK month ..... 98 **Year** ..... ☐☐☐☐ DK year 9998	**Skip to (W.5)**
TT8	HOW MANY YEARS AGO DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY?	Years ago ..... ☐☐	

W.5: Maternal and Newborn Health — MN

#	Question	Options	Skip
	This section is to be administered to all women with a live birth in the 2 years preceding date of interview. Check CM12 (in section W.3a) and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
MN1	IN THE FIRST TWO MONTHS AFTER YOUR LAST BIRTH [*THE BIRTH OF name*], DID YOU RECEIVE A VITAMIN A DOSE LIKE THIS? Show 200,000 IU capsule or dispenser (Red).	Yes ..... 1 No ..... 2 DK 8	
MN2	DID YOU SEE ANYONE FOR ANTENATAL CARE FOR THIS PREGNANCY? **If yes:** WHOM DID YOU SEE? ANYONE ELSE? [Probe for the type of person seen and circle all answers given]	Health professional: Doctor/Clinical Officer ..... A Nurse/Midwife ..... B Other person: Traditional birth attendant ..... F Community health worker ..... G Relative/friend ..... H Other (*specify*_____) ..... X **No one ..... Y**	Y⇨MN6A
MN2A	HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?	No. of times ..... ☐☐ Don't know 98	
MN2B	DURING THIS PREGNANCY, WERE YOU GIVEN OR DID YOU BUY ANY IRON TABLETS? [Show Tablets]	Yes ..... 1 **No ..... 2** **Don't know 8**	2⇨MN3 8⇨MN3
MN2C	DURING THE WHOLE PREGNANCY, FOR HOW MANY DAYS DID YOU TAKE THE TABLETS? [If the answer is not numeric, probe for approximate number of days]	No. of days ..... ☐☐☐ Don't know 998	
MN3	AS PART OF YOUR ANTENATAL CARE, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE?	Y N	
	MN3a. WERE YOU WEIGHED?	Weighed 1 2	
	MN3b. WAS YOUR BLOOD PRESSURE MEASURED?	Blood pressure 1 2	
	MN3c. DID YOU GIVE A URINE SAMPLE?	Urine sample 1 2	
	MN3d. DID YOU GIVE A BLOOD SAMPLE?	Blood sample 1 2	
MN4	DURING ANY OF THE ANTENATAL VISITS FOR THE PREGNANCY, WERE YOU GIVEN ANY INFORMATION OR COUNSELED ABOUT AIDS OR THE AIDS VIRUS?	Yes ..... 1 No ..... 2 Don't know 8	
MN5	I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR HIV/AIDS AS PART OF YOUR ANTENATAL CARE?	Yes ..... 1 **No ..... 2** **Don't know 8**	2⇨MN6A 8⇨MN6A
MN6	I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 Don't know 8	
MN6A	DURING THIS PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO PREVENT YOU FROM GETTING MALARIA?	Yes ..... 1 **No ..... 2** **Don't know 8**	2⇨MN7 8⇨MN7

W.5: Maternal and Newborn Health			MN
#	Question	Options	Skip
MN6B	WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA? [Circle all medicines taken. If type of medicine is not determined, **show typical anti-malarial** to the respondent]	SP/Fansidar ..... A Chloroquine ..... B Others (specify_____) .. X DK ..... Z	***If 'A' is not circled, skip to MN7***
MN6C	HOW MANY TIMES DID YOU TAKE SP/FANSIDAR DURING THIS PREGNANCY TO PREVENT MALARIA?	Number of times ..... ☐☐	
MN7	WHO ASSISTED WITH THE DELIVERY OF YOUR LAST CHILD *(name)*? ANYONE ELSE? [Probe for the type of person assisting and circle all answers given]	Health professional: Doctor/Clinical Officer ..... A Nurse/Midwife ..... B Other person: Traditional birth attendant ..... F Community health worker ..... G Relative/friend ..... H Other (specify_____) ..... X No one ..... Y	
MN8	WHERE DID YOU GIVE BIRTH TO *(name)*? [If the facility is hospital, health center, or clinic; write the name of the place below. Probe to identify the type of source and circle the appropriate code] _____ (NAME OF PLACE?)	Home Your home ..... 11 Other home ..... 12 Public sector Govt. hospital ..... 21 Govt. clinic/health center ..... 22 CHAM ..... 23 Other public (specify)_____ 26 Private Medical Sector Private hospital ..... 31 Private clinic ..... 32 Private maternity home ..... 33 Other pvt. medical (specify_____) .. 36 Other (specify_____) .. 96	
MN8A	AFTER *(name)* WAS BORN, DID A HEALTH PROFESSIONAL OR A TRADITIONAL BIRTH ATTENDANT CHECK ON YOUR HEALTH?	Yes ..... 1 **No** ..... **2** **DK** **8**	2⇨MN8D 8⇨MN8D
MN8B	HOW MANY DAYS OR WEEKS AFTER DELIVERY DID THE FIRST CHECK TAKE PLACE? [Record '00' days if same day]	Days after delivery ..... 1 Weeks after delivery ..... 2 ☐☐ Don't Know 998	
MN8C	WHO CHECKED ON YOUR HEALTH AT THAT TIME? [Probe for most qualified person]	Health professional: Doctor/Clinical Officer ..... 11 Nurse/Midwife ..... 12 Other person: Traditional birth attendant ..... 21 Community health worker ..... 22 Other (specify_____) 96	

W.5: Maternal and Newborn Health			MN
#	Question	Options	Skip
MN8D	**Check MN8 for place of birth:** ☐ **Birth at home (Code 11 or 12)** ⇨ **Continue to MN8E** ☐ **Otherwise** ⇨ **Skip to MN9**		
MN8E	IN THE TWO MONTHS AFTER *(name)* WAS BORN, DID ANY HEALTH CARE PROVIDER OR A TRADITIONAL BIRTH ATTENDANT CHECK ON HIS/HER HEALTH?	Yes ..... 1 **No** ..... **2** **DK** **8**	 2⇨MN9 8⇨MN9
MN8F	HOW MANY HOURS, DAYS OR WEEKS AFTER THE BIRTH OF *(name)* DID THE FIRST CHECK TAKE PLACE? [If less than one day, record in hours. If less than one week, record in days.]	Hours after birth ..... 1 Days after birth ..... 2 Weeks after birth ..... 3 ☐☐ Don't Know 998	
MN8G	WHO CHECKED ON *(name)*'S HEALTH AT THAT TIME? [Probe for most qualified person]	Health professional: Doctor/Clinical Officer ..... 11 Nurse/Midwife ..... 12 Other person: Traditional birth attendant ..... 21 Community health worker ..... 22 Other (*specify*_____) 96	
MN8H	WHERE DID THIS FIRST CHECK OF *(name)* TAKE PLACE? [Probe to identify the type of source and circle the appropriate code. If unable to determine if a hospital, health centre or clinic is public or private medical, write the name of the place] _____ (NAME OF THE PLACE)	Home Your home ..... 11 Other home ..... 12 Public sector Govt. hospital ..... 21 Govt. clinic/health center ..... 22 CHAM ..... 23 Other public (*specify*_____) ..... 26 Private Medical Sector Private hospital ..... 31 Private clinic ..... 32 Private maternity home ..... 33 Other pvt. medical (*specify*_____) ..... 36 Other (*specify*_____) 96	
MN9	WHEN YOUR LAST CHILD *(name)* WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large ..... 1 Larger than average ..... 2 Average ..... 3 Smaller than average ..... 4 Very small ..... 5 DK 8	
MN10	WAS *(name)* WEIGHED AT BIRTH?	Yes ..... 1 **No** ..... **2** **DK** **8**	 2⇨MN12 8⇨MN12

W.5: Maternal and Newborn Health — MN

#	Question	Options	Skip
MN11	HOW MUCH DID *(name)* WEIGH? [Record weight from health card, if available]	Card ..... 1 Re-call ..... 2 (Record in Kgs) □.□□□ Don't know 99998	
MN12	DID YOU EVER BREASTFEED *(name)*?	Yes ..... 1 **No 2**	 2⇨ (W.6)
MN13	HOW LONG AFTER BIRTH DID YOU FIRST PUT *(name)* TO THE BREAST? If less than 1 hour, record '00' hours. If less than 24 hours, record hours. Otherwise, record days.	Immediately ..... 000 Hours after ..... 1 Days after ..... 2 □□ Don't know/remember 998	
MN14	DID *(name)* RECEIVE ANYTHING ELSE BEFORE STARTING TO BREASTFEED?	Yes ..... 1 **No ..... 2** **Don't know 8**	 2⇨ (W.6) 8⇨ (W.6)
MN15	DID *(name)* RECEIVE ANY OF THE FOLLOWING:	Yes / No	
	MN15A. PLAIN WATER?	Plain water ..... 1 / 2	
	MN15B. MINERAL WATER?	Mineral water ..... 1 / 2	
	MN15C. SWEETENED, FLAVOURED WATER?	Sweetened/Flavored water ..... 1 / 2	
	MN15D. FRUIT JUICE OR TEA?	Fruit juice or tea ..... 1 / 2	
	MN15E. ANYTHING ELSE?	Other (specify_____) ... 1 / 2	

W.6: Marriage/Union — MA

#	Question	Options	Skip
MA1	ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married ..... 1 Yes, living with a man ..... 2 **No, not in union** **3**	3⇨MA3
MA2	HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	**Age in years** ..... ☐☐ **DK** **98**	**SKIP TO ⇨ MA5**
MA3	HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN?	Yes, formerly married ..... 1 Yes, formerly lived with a man ..... 2 **No** **3**	3⇨(W.7)
MA4	WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	
MA5	HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MA6	IN WHAT MONTH AND YEAR DID YOU **FIRST** MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Month ..... ☐☐ DK month ..... 98 Year ..... ☐☐☐☐ DK year 9998	
MA7	**Check MA6: For month and year of marriage** ☐ **Both Month and year of marriage are known?** **⇨ Next Section (W.7)** ☐ **Either month or year of marriage/union not known?** **⇨ Continue to MA8**		
MA8	HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years ..... ☐☐	

W.7: Contraception and Unmet Need — CP

#	Question	Options	Skip
CP1	I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING – AND YOUR REPRODUCTIVE HEALTH. ARE YOU PREGNANT NOW?	Yes, currently pregnant ..... 1 **No ..... 2** **Unsure or Don't know 8**	 2⇨ CP2 8⇨ CP2
CP1A	AT THE TIME YOU BECOME PREGNANT DID YOU WANT TO BECOME PREGNANT THEN, DID YOU WANT TO WAIT UNTIL LATER, OR DID YOU NOT WANT TO HAVE ANY MORE CHILDREN?	Then ..... 1 Later ..... 2 Not want more children 3	1⇨ CP4 2⇨ CP4 3⇨ CP4
CP2	SOME PEOPLE USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes ..... 1 **No 2**	 2⇨ CP6
CP3	WHICH METHOD ARE YOU USING? Do not prompt. If more than one method is mentioned, circle each one.	Female sterilization/Tubeligation ..... A Male sterilization/Vasectomy ..... B Pill ..... C IUD/coil ..... D Injections ..... E Implants ..... F Condom ..... G Female condom ..... H Diaphragm ..... I Lactational amenorrhoea method (LAM) ..... J Periodic abstinence ..... K Withdrawal ..... L Other (specify _____) ... X	
CP4	NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. WOULD YOU LIKE TO HAVE (A/ANOTHER) CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY (MORE) CHILDREN? **If currently pregnant:** AFTER THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD OR YOU WOULD PREFER NOT TO HAVE ANY (MORE) CHILDREN?	Have (a/another) child ..... 1 **No more/none ..... 2** **Says she cannot get pregnant ..... 3** **Undecided/don't know 8**	 2⇨ CP6 3⇨ (W.8) 8⇨ CP6
CP5	HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months ..... 1 ☐☐ Years ..... 2 Soon/now ..... 993 **Says she cannot get pregnant ..... 994** After marriage ..... 995 Other ..... 996 Don't know 998	 994⇨ (W.8)
CP6	**Check CP1: Pregnancy status** ☐ **Currently pregnant (code = 1) ⇨ Next Section (W.8)** ☐ **Not currently pregnant ⇨ Continue to CP7**		
CP7	DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?	Yes ..... 1 No ..... 2 Don't know 3	

W.8: Female Genital Mutilation/Cutting — FG

#	Question	Options	Skip
FG1	HAVE YOU EVER HEARD OF FEMALE CIRCUMCISION?	**Yes** ..... **1** No 2	1⇨FG3
FG2	IN A NUMBER OF COMMUNITIES, THERE IS A PRACTICE IN WHICH A GIRL MAY HAVE PART OF HER GENITALS CUT. HAVE YOU EVER HEARD ABOUT THIS PRACTICE?	Yes ..... 1 **No** **2**	2⇨(W.9)
FG3	HAVE YOU YOURSELF EVER BEEN CIRCUMCISED?	Yes ..... 1 **No** **2**	2⇨FG8
FG4	NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO YOU AT THIS TIME. WAS ANY FLESH REMOVED FROM THE GENITAL AREA?	**Yes** ..... **1** No ..... 2 DK 8	1⇨FG6
FG5	WAS THE GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes ..... 1 No ..... 2 DK 8	
FG6	WAS THE GENITAL AREA SEWN CLOSED (OR 'SEALED')?	Yes ..... 1 No ..... 2 DK 8	
FG7	WHO CIRCUMCISED YOU?	TRADITIONAL PERSONS Traditional 'circumciser' ..... 11 Traditional birth attendant ..... 12 Other traditional (***specify*** _____) .. 16 HEALTH PROFESSIONAL Doctor ..... 21 Nurse/midwife ..... 22 Other health professional (***specify*** _____) .. 26 Don't know 98	
FG8	**Check CM4 and CM6 (in Section W.3): Woman has living daughter?** ☐ **Yes, has living daughter** ⇨ **Continue with FG9** ☐ **No living daughter** ⇨ **Go to FG16**		
FG9	HAVE ANY OF YOUR DAUGHTERS BEEN CIRCUMCISED? **If yes**, HOW MANY?	No. of daughters circumcised ..... ☐☐ **No daughters circumcised** **00**	00⇨FG16
FG10	TO WHICH OF YOUR DAUGHTERS DID THIS HAPPEN MOST RECENTLY? [Record the daughter's name]	Name of daughter: _____	
FG11	NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO *(name)* AT THAT TIME. WAS ANY FLESH REMOVED FROM THE GENITAL AREA?	**Yes** ..... **1** No ..... 2 DK 8	1⇨FG13

W.8: Female Genital Mutilation/Cutting			FG
#	Question	Options	Skip
FG12	WAS THE GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes ..... 1 No ..... 2 DK 8	
FG13	WAS THE GENITAL AREA SEWN CLOSED (OR 'SEALED')?	Yes ..... 1 No ..... 2 DK 8	
FG14	HOW OLD WAS *(name)* WHEN THIS OCCURRED? [If the respondent does not know the age, probe to get an estimate]	Daughter's age at circumcision ..... ☐☐ Don't know 98	
FG15	WHO DID THE CIRCUMCISION FOR *(name)*?	TRADITIONAL PERSONS Traditional 'circumciser' ..... 11 Traditional birth attendant ..... 12 Other traditional (***specify*** _____) ..... 16 HEALTH PROFESSIONAL Doctor ..... 21 Nurse/midwife ..... 22 Other health professional (***specify*** _____) ..... 26 Don't know 98	
FG16	DO YOU THINK THIS PRACTICE SHOULD BE CONTINUED OR SHOULD IT BE DISCONTINUED?	Continued ..... 1 Discontinued ..... 2 Depends ..... 3 DK 8	

W.9: Domestic Violence						DV
#	Question	Options				Skip
DV1	SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:		Yes	No	DK	
	DV1A. IF SHE GOES OUT WITH OUT TELLING HIM?	Goes out without telling.....	1	2	8	
	DV1B. IF SHE NEGLECTS THE CHILDREN?	Neglects the children.....	1	2	8	
	DV1C. IF SHE ARGUES WITH HIM?	Argues with husband.....	1	2	8	
	DV1D. IF SHE REFUSES SEX WITH HIM?	Refuses sex.....	1	2	8	
	DV1E. IF SHE BURNS THE FOOD?	Burns the food.....	1	2	8	

W.10: HIV/AIDS			HA
#	Question	Options	Skip
HA1	NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF THE VIRUS HIV OR AN ILLNESS CALLED AIDS?	Yes ..... 1 **No** **2**	2⇨ END
HA2	CAN PEOPLE PROTECT THEMSELVES FROM GETTING INFECTED WITH THE AIDS VIRUS BY HAVING ONE SEX PARTNER WHO IS NOT INFECTED AND ALSO HAS NO OTHER PARTNERS?	Yes ..... 1 No ..... 2 Don't know 8	
HA3	CAN PEOPLE GET INFECTED WITH THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2 Don't know 8	
HA4	CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes ..... 1 No ..... 2 Don't know 8	
HA5	CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes ..... 1 No ..... 2 Don't know 8	
HA6	CAN PEOPLE REDUCE THEIR CHANCE OF GETTING INFECTED WITH THE AIDS VIRUS BY NOT HAVING SEX AT ALL?	Yes ..... 1 No ..... 2 Don't know 8	
HA7	CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes ..... 1 No ..... 2 Don't know 8	
HA7A	CAN PEOPLE GET THE AIDS VIRUS BY GETTING INJECTIONS WITH A NEEDLE THAT WAS ALREADY USED BY AN INFECTED PERSON?	Yes ..... 1 No ..... 2 Don't know 8	
HA8	IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes ..... 1 No ..... 2 Don't know 8	
HA9	CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A BABY (.....)	Yes / No / DK	
	HA9A. DURING PREGNANCY?	During pregnancy 1 2 8	
	HA9B. DURING DELIVERY?	During delivery 1 2 8	
	HA9C. BY BREASTFEEDING?	By breastfeeding 1 2 8	
HA10	IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2 Don't know/not sure/depends 8	
HA11	WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes ..... 1 No ..... 2 Don't know/not sure/depends 8	

W.10: HIV/AIDS			HA
HA12	IF A MEMBER OF YOUR FAMILY BECAME INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2 Don't know/not sure/depends 8	
HA13	IF A MEMBER OF YOUR FAMILY BECAME SICK WITH THE AIDS VIRUS, WOULD YOU BE WILLING TO CARE FOR HIM OR HER IN YOUR HH?	Yes ..... 1 No ..... 2 Don't know/not sure/depends 8	
HA14	**Check MN5 (in Section W.5): Tested for HIV during antenatal care?** ☐ **Yes ⇨ HA19** ☐ **No ⇨ Continue to HA15**		
HA15	I DO NOT WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE HIV, THE VIRUS THAT CAUSES AIDS?	Yes ..... 1 **No 2**	2⇨HA18
HA16	I DO NOT WANT YOU TO TELL ME THE RESULTS OF THE TEST, BUT HAVE YOU BEEN TOLD THE RESULTS?	Yes ..... 1 No 2	
HA17	DID YOU, YOURSELF, ASK FOR THE TEST, WAS IT OFFERED TO YOU AND YOU ACCEPTED, OR WAS IT REQUIRED?	**Asked for the test ..... 1** **Offered and accepted ..... 2** **Required 3**	**END**
HA18	AT THIS TIME, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET SUCH A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	**Yes ..... 1** **No 2**	**END**
HA19	OTHER THAN AT THE ANTENATAL CLINIC, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	

-: Check, whether the Form has any gaps, if yes, fill-in those gaps and thank the respondent for spending time and providing valuable information; and go to the next respondent :–

Remarks/Observations by the Supervisor/Editor/Coordinators:

FORM-C: CHILD BELOW 5 YEARS

C.1: General Information — *ENGLISH*

This FORM is to be administered to all mothers/caretakers (See Column HL8 of HH Listing Form) who care for a child that lives with them and is under the age of 5 years (See Column HL5 of HH Listing Form). Use a separate Form for each eligible child.

UF-A	Province Name & Code		☐
UF-B	District Name & Code		☐☐
UF1	Cluster Name and Number ☐☐	UF-C	Stratum Code: [Child < 3 = 1/Other = 2] ☐
UF2	HH No.		☐☐☐
UF4	Child Name & Line No.		☐☐
UF6	Mother/Caretaker Name & Line No.		☐☐
UF7	Interviewer's Name & Code		☐☐☐
UF8	Day/Month/Year of interview		☐☐/☐☐/☐☐☐☐
UF9	Result of interview for children under 5 [Codes refer to mother/caretaker]		Completed ..... 1 Not at home ..... 2 Refused ..... 3 Partly completed ..... 4 Incapacitated ..... 5 Other (Specify)_____ 6

Remarks

Read, if the respondent has not responded to any other Forms

Introduction/Consent

HELLO. MY NAME IS (.....) AND I AM WORKING WITH THE KENYA NATIONAL BUREAU OF STATISTICS (KNBS), NAIROBI. WE ARE DOING A SURVEY TO COLLECT INFORMATION ABOUT FAMILY HEALTH AND EDUCATION, FOCUSING ON CHILDREN AND WOMEN, WITH UNICEF SUPPORT. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 20 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND EVENTUALLY BE ANONYMOUS. DURING THIS TIME I WOULD LIKE TO SPEAK TO YOU ABOUT YOUR CHILDREN AND/OR CHILDREN YOU TAKE CARE IN THIS HOUSEHOLD.

THE INFORMATION YOU PROVIDE WILL HELP THE GOVERNMENT AND DEVELOPMENT AGENCIES IN PLANNING AND IMPLEMENTING DEVELOPMENTAL PROGRAMS.

MAY I START THE INTERVIEW NOW?

UF10	NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF EACH CHILD UNDER THE AGE OF 5 IN YOUR CARE, WHO LIVES WITH YOU/IN THIS HH NOW. NOW I WANT TO ASK YOU ABOUT (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? **Probe:** WHAT IS HIS/HER BIRTHDAY? DOES HE/SHE HAVE A BIRTH CERTIFICATE? [If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day]	**Date of birth:** Day ☐☐ Don't know the day of birth 98 Month ☐☐ Year ☐☐☐☐
UF11	HOW MANY MONTHS OLD IS (*name*)? [Record age in completed months]	Age in months ☐☐

C.2: Birth Registration and Early Learning — BR

#	Question	Options	Skip
BR1	DOES (*name*) HAVE A BIRTH CERTIFICATE? MAY I SEE IT?	**Yes, seen** 1 **Yes, not seen** 2 No 3 Don't know 8	1⇨BR5 2⇨BR5
BR2	HAS (*name's*) BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?	**Yes** 1 No 2 **Don't know** 8	1⇨BR5 8⇨BR4
BR3	WHY IS (*name's*) BIRTH NOT REGISTERED? PROBE: DID YOU KNOW THAT A BIRTH HAS TO BE REGISTERED? DID YOU TRY TO REGISTER THIS ONE? WHY DID YOU FAIL TO REGISTER THIS BIRTH?	Costs too much 1 Must travel too far 2 Did not know it should be registered 3 Did not want to pay fine 4 Does not know where to register 5 Other (*specify*_____) 6 Don't know 8	
BR4	DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes 1 No 2	
BR4A	DO YOU KNOW WHERE TO REGISTER YOUR CHILD'S BIRTH?	Yes 1 No 2	
BR5	**Check UF11 (age of the child): Child is 36-59 months old?** ☐ **Yes ⇨ Continue to BR6** ☐ **No ⇨ Go to BR8**		
BR6	DOES (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes 1 **No** 2 **Don't know** 8	 2⇨BR7A 8⇨BR8
BR7	WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	No. of Hours ☐☐	**Skip to BR8**

C.2: Birth Registration and Early Learning — BR

BR7A	WHAT IS THE MAIN REASON FOR (*name*) NOT ATTENDING ANY PRE-SCHOOL LEARNING/EARLY CHILDHOOD EDUCATION PROGRAM?	No facility nearby ..... 1 The facility is not good ..... 2 No money to pay the fees/expensive ..... 3 Child is too young ..... 4 Other (specify_____) .... 6 Don't know 8				
BR8	IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): ***If yes, ask:*** WHO ENGAGED IN THIS ACTIVITY WITH THE CHILD - THE MOTHER, THE CHILD'S FATHER OR ANOTHER ADULT MEMBER OF THE HOUSEHOLD (INCLUDING THE CARETAKER/RESPONDENT)? *Circle all that apply.*	Mother	Father	Other	None	
BR8a	READ BOOKS OR LOOK AT PICTURE BOOKS WITH (*name*)?	A	B	X	Y	
BR8b	TELL STORIES TO (*name*)?	A	B	X	Y	
BR8c	SING SONGS WITH (*name*)?	A	B	X	Y	
BR8d	TAKE (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	A	B	X	Y	
BR8e	PLAY WITH (*name*)?	A	B	X	Y	
BR8f	SPEND TIME WITH (*name*) NAMING, COUNTING, AND/OR DRAWING THINGS?	A	B	X	Y	

C.3: Vitamin A — VA

#	Question	Options	Skip
VA1	HAS (name) EVER RECEIVED A VITAMIN A CAPSULE (SUPPLEMENT) LIKE THIS ONE? SHOW CAPSULE OR DISPENSER FOR DIFFERENT DOSES: 100,000 IU FOR THOSE 6-11 MONTHS OLD (BLUE/YELLOW) 200,000 IU FOR THOSE 12-59 MONTHS OLD (RED)	Yes ..... 1 **No ..... 2** **Child below 6 months old ..... 3** **Don't know 8**	 2⇨ (C.4) 3⇨ (C.4) 8⇨ (C.4)
VA2	HOW MANY MONTHS AGO DID (*name*) TAKE THE LAST DOSE?	Months ..... ☐☐ Don't know 98	
VA3	WHERE DID (*name*) GET THIS LAST DOSE?	On routine visit to health facility ..... 1 Sick child visit to health facility ..... 2 National Immunization/Vit. A Campaign ..... 3 Other (*Specify*_____) ... 6 Don't know 8	

C.4: Breastfeeding — BF

#	Question	Options	Skip
BF1	HAS (*name*) EVER BEEN BREASTFED?	Yes ..... 1 **No ..... 2** **Don't know 8**	 2⇨ BF3 8⇨ BF3
BF1a	HOW LONG AFTER BIRTH WAS (*name*) PUT TO THE BREAST FOR THE FIRST TIME?	Immediately after birth ..... 000 Hours ..... 1 ☐☐ Days ..... 2 Don't know 998	
BF2	IS HE/SHE STILL BEING BREASTFED?	**Yes ..... 1** No ..... 2 **Don't know 8**	1⇨ BF2b 8⇨ BF3
BF2a	FOR HOW MANY MONTHS DID (*name*) BREASTFEED?	Months ..... ☐☐ Don't know 98	Skip to BF3
BF2b	SINCE THIS TIME YESTERDAY, HOW MANY TIMES HAS (*name*) BREASTFED? *(If answer is not numeric, probe for approximate number)*	Times Breastfed ..... ☐☐ Don't know 98	

BF3 — SINCE THIS TIME YESTERDAY, DID HE/SHE RECEIVE ANY OF THE FOLLOWING:
(Read each item aloud and record response before proceeding to the next item)

Item	Yes	No	DK
BF3A. VITAMIN, MINERAL SUPPLEMENTS OR MEDICINE?	1	2	8
BF3B. PLAIN WATER?	1	2	8
BF3C. SWEETENED, FLAVOURED WATER OR FRUIT JUICE OR TEA OR INFUSION?	1	2	8
BF3D. ORAL REHYDRATION SOLUTION (ORS)?	1	2	8
BF3E. INFANT FORMULA?	1	2	8
BF3F. TINNED, POWDERED OR FRESH MILK?	1	2	8
BF3G. ANY OTHER LIQUIDS?	1	2	8
BF3H. SOLID OR SEMI-SOLID (MUSHY) FOOD?	1	2	8

BF4 — **Check BF3H. Child received solid or semi-solid (mushy) food?**

☐ **Yes** ⇨ **Continue to BF5**

☐ **No or DK** ⇨ **Next Section (C.5)**

C.4: Breastfeeding			BF
#	Question	Options	Skip
BF5	SINCE THIS TIME YESTERDAY, HOW MANY TIMES DID *(name)* EAT SOLID, SEMISOLID OR SOFT FOODS OTHER THAN LIQUIDS? *(If 7 or more times, record 7)*	No. of times ..... ☐ Don't know 8	
BF5a	AT WHAT AGE DID *(name)* START RECIVING WATER OTHER THAN BREASTMILK? *(If 7 or more months old, record 7)*	Age in months ..... ☐ Don't know 8	
BF5b	AT WHAT AGE DID *(name)* START RECIVING SOLID OR SEMI-SOLID FOOD? *(If 15 or more months old, record 15)*	Age in months ..... ☐☐ Don't know 98	

C.5: Care of Childhood Illness — CI

#	Question	Options	Skip
CA1	HAS (*name*) HAD DIARRHOEA IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST? *(Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool)*	Yes ..... 1 **No** ..... **2** **Don't know** **8**	 2⇨CA5 8⇨CA5
CA2	DURING THIS LAST EPISODE OF DIARRHOEA, DID (*name*) DRINK ANY OF THE FOLLOWING: *Read each item aloud and record response before proceeding to the next item.*		

Item	Yes	No	DK	Skip
CA2A. A FLUID MADE FROM A SPECIAL PACKET CALLED (*local name for ORS packet solution*)?	1	2	8	
CA2B. GOVERNMENT-RECOMMENDED HOMEMADE FLUID?	1	2	8	
CA2C. A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?	1	2	8	

CA3	DURING (*name's*) ILLNESS, DID HE/SHE DRINK MUCH LESS, ABOUT THE SAME, OR MORE THAN USUAL?	Much less or none ..... 1 About the same (or somewhat less) ..... 2 More ..... 3 Don't know 8	
CA4	DURING (*name's*) ILLNESS, DID HE/SHE EAT LESS, ABOUT THE SAME, OR MORE FOOD THAN USUAL? **If "less", probe:** MUCH LESS OR A LITTLE LESS?	None ..... 1 Much less ..... 2 Somewhat less ..... 3 About the same ..... 4 More ..... 5 Don't know 8	
CA5	HAS (*name*) HAD AN ILLNESS WITH A COUGH AT ANY TIME IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST?	Yes ..... 1 **No** ..... **2** **Don't know** **8**	 2⇨CA12 8⇨CA12
CA6	WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, QUICK BREATHS OR HAVE DIFFICULTY BREATHING?	Yes ..... 1 **No** ..... **2** **Don't know** **8**	 2⇨CA12 8⇨CA12
CA7	WERE THE SYMPTOMS DUE TO A PROBLEM IN THE CHEST OR A BLOCKED NOSE?	Problem in chest ..... 1 **Blocked nose** ..... **2** Both ..... 3 **Other *(specify_____)*** ... **6** Don't know 8	 2⇨CA12 6⇨CA12
CA8	DID YOU SEEK ADVICE OR TREATMENT FOR THE ILLNESS OUTSIDE THE HOME?	Yes ..... 1 **No** ..... **2** **Don't know** **8**	 2⇨CA10 8⇨CA10

C.5: Care of Childhood Illness			CI
CA9	FROM WHERE DID YOU SEEK CARE? ANYWHERE ELSE? [Circle all providers mentioned, but do NOT prompt with any suggestions] [If source is hospital, health center, or clinic, write the name of the place below. Probe to identify the type of source and circle the appropriate code.] _____ (NAME OF PLACE)	**Public sector** Govt. hospital ..... A Govt. health centre ..... B Govt. health post ..... C Village health worker ..... D Mobile/outreach clinic ..... E Other public (specify_____) ..... H **Private medical sector** Private hospital/clinic ..... I Private physician ..... J Private pharmacy ..... K Mobile clinic ..... L Other private (specify_____) ..... O **Other source** Relative or friend ..... P Shop ..... Q Traditional practitioner ..... R Other (specify_____) X	
CA10	WAS (*name*) GIVEN MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 **No ..... 2** **Don't know 8**	2⇨CA12 8⇨CA12
CA11	WHAT MEDICINE WAS (*name*) GIVEN? (Circle all medicines given)	Antibiotic ..... A Paracetamol/Panadol/Acetaminophen ..... P Aspirin ..... Q Ibupropfen ..... R Other (*specify*_____) ..... X Don't know ..... Z	
CA12	**Check UF11: Child age 0-35 months?** ☐ **Yes ⇨ Continue to CA13** ☐ **No ⇨ CA14**		
CA13	THE LAST TIME (*name*) PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?	Child used toilet/latrine ..... 01 Put/rinsed into toilet or latrine ..... 02 Put/rinsed into drain or ditch ..... 03 Thrown into garbage (solid waste) ..... 04 Buried ..... 05 Left in the open ..... 06 Other (*specify*) _____ 96 Don't know 98	
CA14	[Ask **ONLY ONCE** for each mother/ caretaker] SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY? [Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms. Circle all symptoms mentioned] [Do not prompt with any suggestions]	Child not able to drink or breastfeed ..... A Child becomes sicker ..... B Child develops a fever ..... C Child has fast breathing ..... D Child has difficult breathing ..... E Child has blood in stool ..... F Child is drinking poorly ..... G Other1 (*specify*_____) . X Other 2(*specify*_____) . Y Other3 (*specify*_____) . Z	

C.6: Malaria			ML
#	Question	Options	Skip
ML1	IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST, HAS (*name*) BEEN ILL WITH A FEVER?	Yes ..... 1 **No** ..... **2** **Don't' know** **8**	 2⇨ML10 8⇨ML10
ML2	WAS (*name*) SEEN AT A HEALTH FACILITY DURING THIS ILLNESS?	Yes ..... 1 **No** ..... **2** **Don't' know** **8**	 2⇨ML6 8⇨ML6
ML3	DID (*name*) TAKE A MEDICINE FOR FEVER OR MALARIA THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY?	Yes ..... 1 **No** ..... **2** **Don't' know** **8**	 2⇨ML5 8⇨ML5
ML4	WHAT MEDICINE DID (*name*) TAKE THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY? *[Circle all medicines mentioned]*	Anti-malarials: SP/Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Artemisinin-based combinations ..... E Other anti-malarial *(specify_____)*. H Other medications: Paracetamol/Panadol/Acetaminophen ..... P Aspirin ..... Q Ibuprofen ..... R Other (*specify_____*) ..X Don't know ..... Z	
ML5	WAS (*name*) GIVEN MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	**Yes** ..... **1** **No** ..... **2** **Don't' know** **8**	1⇨ML7 2⇨ML8 8⇨ML8
ML6	WAS (*name*) GIVEN MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ..... 1 **No** ..... **2** **Don't' know** **8**	 2⇨ML8 8⇨ML8
ML7	WHAT MEDICINE WAS (*name*) GIVEN? *[Circle all medicines given. Ask to see the medication if type is not known. If type of medication is still not determined, show typical anti-malarials to respondent.]*	Anti-malarials: SP/Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Artemisinin-based combinations ..... E Other anti-malarial *(specify_____)*. H Other medications: Paracetamol/Panadol/Acetaminophen ..... P Aspirin ..... Q Ibuprofen ..... R Other (*specify_____*) ....X Don't know ..... Z	

C.6: Malaria			ML
#	Question	Options	Skip
ML8	**Check ML4 and/or ML7: Anti-malarial mentioned (Codes A-H)?** ☐ **Yes ⇨ Continue to ML9** ☐ **No ⇨ ML10**		
ML9	HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML4 or ML7*)? [If multiple anti-malarials mentioned in ML4 or ML7, name all anti-malarial medicines mentioned] [Record the code for the day on which the first anti-malarial was given]	Same day ..... 0 Next day ..... 1 2 days after the fever ..... 2 3 days after the fever ..... 3 4 or more days after the fever ..... 4 DK 8	
ML10	DID (*name*) SLEEP UNDER A MOSQUITO NET LAST NIGHT?	Yes ..... 1 No ..... 2 Don't' know 8	

C.7: Child Immunization — IM

#	Question		Options	Skip
If an immunization card is available, copy the dates in IM2-IM8b for each type of immunization or vitamin A dose recorded on the card. IM9 is for recording vaccinations that are not recorded on the card. IM10-IM17 will only be asked when a card is not available.				
IM1	IS THERE A VACCINATION CARD FOR (*name*)?		Yes, seen ..... 1 **Yes, not seen ..... 2** **No 3**	 2⇨IM10 3⇨IM10
	(a) Copy dates for each vaccination from the card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.		Date of Immunization Day / Month / Year	
IM2	BCG	BCG		
IM3a	Polio 0	OPV 0		
IM3b	Polio 1	OPV 1		
IM3c	Polio 2	OPV 2		
IM3d	Polio 3	OPV 3		
IM4a	DPT - HepB + Hib: 1 (Pentavalent 1)	DPT 1		
IM4b	DPT - HepB + Hib: 2 (Pentavalent 2)	DPT 2		
IM4c	DPT - HepB + Hib: 3 (Pentavalent 3)	DPT 3		
IM6	Measles (or MMR)	Measles		
IM7	Yellow fever	Y Fever		
IM8a	Vitamin A (1)	Vit. A1		
IM8b	Vitamin A (2)	Vit A2		
IM9	IN ADDITION TO THE VACCINATIONS AND VITAMIN A CAPSULES SHOWN ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? [Record 'Yes' only if respondent mentions BCG, OPV 0-3, DPT 1-3, Measles or Vitamin A supplements.]		Yes ..... 1 (Probe for vaccinations and write '66' in the corresponding day column on IM2 to IM8B and go to IM19.) **No ..... 2** **Don't know 8**	 2⇨IM19 8⇨IM19
IM10	HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?		Yes ..... 1 **No ..... 2** **Don't know 8**	 2⇨IM19 8⇨IM19
IM11	HAS (*name*) EVER BEEN GIVEN A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT CAUSED A SCAR?		Yes ..... 1 No ..... 2 Don't know 8	
IM12	HAS (*name*) EVER BEEN GIVEN ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?		Yes ..... 1 **No 2**	 2⇨IM15

C.7: Child Immunization						IM
		Don't know **8**				8⇨IM15
IM13	HOW OLD WAS (*name*) WHEN THE FIRST DOSE WAS GIVEN – JUST AFTER BIRTH (WITHIN TWO WEEKS) OR LATER?	Just after birth (within two weeks) ..... 1 Later 2				
IM14	HOW MANY TIMES (*name*) BEEN GIVEN THESE DROPS?	No. of times ..... ☐☐				
IM15	HAS (*name*) EVER BEEN GIVEN "**DPT/ HepB/ Hib1** VACCINATION INJECTIONS" – THAT IS, AN INJECTION IN THE THIGH AND BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, DIPHTHERIA, HEPATITIS B, *HAEMOPHILIS INFLUENZAE TYPE B*? SOMETIMES GIVEN AT THE SAME TIME AS POLIO.	Yes ..... 1 **No** ..... **2** **Don't know** **8**				2⇨IM17 8⇨IM17
IM16	HOW MANY TIMES?	No. of times ..... ☐				
IM17	HAS (*name*) EVER BEEN GIVEN "MEASLES VACCINATION INJECTIONS" OR MMR – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes ..... 1 No ..... 2 Don't know 8				
IM18	HAS (*name*) EVER BEEN GIVEN "YELLOW FEVER VACCINATION INJECTIONS" – THAT IS, A SHOT IN THE ARM AT THE AGE OF **9** MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING YELLOW FEVER? SOMETIMES GIVEN AT THE SAME TIME AS MEASLES	Yes ..... 1 No ..... 2 Don't know 8				
IM19	PLEASE TELL ME. IF (*name*) HAS PARTICIPATED IN ANY OF THE FOLLOWING CAMPAIGNS, NATIONAL IMMUNIZATION DAYS AND/OR VITAMIN A OR CHILD HEALTH DAYS:		Yes	No	DK	
IM19a	CHILD HEALTH DAYS, VIT-A CAMPAIGN		1	2	8	
IM19b	MEASLES & VITAMIN A CAMPAIGN		1	2	8	
IM19c	CHILD HEALTH DAYS - VIT. A & DEWORMING CAMPAIGN		1	2	8	
IM20	**Does another eligible child reside in the HH for whom this respondent is mother/caretaker? Check HH listing, column HL8.** ☐ **Yes ⇨ End the current Form and go for another 'Child < 5 Form' to administer the Form for the next eligible child.** ☐ **No ⇨ End the interview with this respondent by thanking him/her cooperation. If this the last eligible child in the HH, go on to Anthropometry Section (C.8).**					

C.8: Anthropometry — AN

#	Question	Options	Skip
	After completing Forms for all children age 6-59 months, the weight and height measurements of each child are to be taken. Record weight and length/height below, taking care to record the measurements on the correct Form for each child. Check the child's name and line number on the HH Listing Section before recording measurements.		
AN-A	**Check UF11: Child age 6-59 months?** ☐ **Yes ⇨ Continue to AN-B** ☐ **No ⇨ END**		
AN-B	Name and Line Number of the Child _____	Line Number ..... ☐☐	
AN1	Child's weight	Kilograms (Kg) ..... ☐☐.☐	
AN2	**Child's length or height. Check age of child in UF11:**		
	☐ **Child age below 24 months ⇨ Measure length (lying down).**	**Length (cm)** Lying down ..... ☐☐☐.☐	
	☐ **Child age 24+ months ⇨ Measure height (standing up).**	**Height (cm)** Standing ..... ☐☐☐.☐	
AN3	Measurer/investigator identification code	Measurer Code ..... ☐☐	
AN4	Result of measurement	Measured ..... 1 Not present ..... 2 Refused ..... 3 Others (Specify) _____ 6	
AN5	**Is there another child in the HH who is eligible for measurement?** ☐ **Yes ⇨ Record measurements for next child.** ☐ **No ⇨ End the interview with this household by thanking all participants for their cooperation.** **Gather together all Forms for this HH and check that all identification numbers are inserted on each page. Tally on the Household Information Panel the number of interviews completed.**		

Remarks/Observations by the Supervisor/Editor/Coordinators:

Kenya - Eastern Province, Moyale District

Multiple Indicator Cluster Survey

2008