

Monitoring the Situation of  
Children and Women

Malawi  
Multiple Indicator Cluster Survey  
2006



PRELIMINARY REPORT



National Statistical Office  
Zomba, Malawi



United Nations Children's Fund  
Lilongwe, Malawi



**MALAWI**  
**MULTIPLE INDICATOR CLUSTER SURVEY (MICS)**  
**2006**

**PRELIMINARY REPORT**

**National Statistical Office**  
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**Lilongwe, Malawi**

**February 2007**

This report summarizes the findings of the 2006 Multiple Indicator Cluster Survey (MICS) carried out by the National Statistical Office (NSO) in collaboration with the United Nations Children's Fund (UNICEF). The survey aims at providing statistically valid estimates at district level on a number of indicators related to the wellbeing of children and women in Malawi.

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For full set of resources on the Multiple Indicator Cluster Survey (MICS) visit UNICEF's global website : [www.childinfo.org](http://www.childinfo.org)

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## FOREWORD

The 2006 Multiple Indicator Cluster Survey (MICS) is the largest , nationally representative sample survey conducted by National Statistical Office. It covered a total of 31,200 households (1,200 households per district) .

The survey's main objective was to obtain statistically valid estimates at district level on a number of social development indicators related to Malawi Growth and Development Strategy (MGDS), the Millennium Development Goals (MDGs) and the goals of A World Fit for Children (WFFC). Information on more than 20 of the 48 MDG indicators has been collected in MICS, offering the largest single source of data for MDG monitoring.

This report is a preliminary report of the 2006 MICS results, highlighting its findings. The report is intended to provide policy makers and programme managers with a first glimpse of the survey results. A more comprehensive and detailed report is scheduled later in the year. Figures in the final report are not expected to differ substantially from those in this report; however, the results presented here should be regarded as provisional and subject to modification.

I wish to acknowledge the efforts of a number of organisations and individuals who contributed immensely towards the success of the survey. First I would like to acknowledge the technical and financial assistance from the United Nations Children's Fund (UNICEF). Acknowledgements are also due to the Save the Children Fund for funding the survey. Finally, the hard work and dedication of the staff of the National Statistical Office (NSO) and the staff of the UNICEF for making the survey results available in time.

Finally, I am grateful to the survey respondents who generously gave their time to provide the information that forms the basis of this and later reports.

Charles Machinjili  
Commissioner of Statistics

## SUMMARY TABLE OF FINDINGS - MALAWI 2006

Topic	Indicator	Value	Unit
<b>Fertility</b>	Total fertility rate	6.3	Per woman
	Crude birth rate	43.6	Per 1,000 population
<b>Child mortality</b>	Neonatal mortality rate	31	Per 1,000 live births
	Infant mortality rate	69	Per 1,000 live births
	Under-five mortality rate	118	Per 1,000 live births
<b>Nutrition</b>	Stunting prevalence	45.9	Per cent
	Wasting prevalence	3.3	Per cent
	Underweight prevalence	19.4	Per cent
	Exclusive breastfeeding rate 0-3 months	71.0	Per cent
	Exclusive breastfeeding rate 0-5 months	56.4	Per cent
	Timely complementary feeding rate	89.0	Per cent
	Continued breastfeeding rate (12-15 months)	97.4	Per cent
Continued breastfeeding rate (20-23 months)	73.4	Per cent	
<b>Child health</b>	Tuberculosis immunization coverage	95.5	Per cent
	DPT 3 immunization coverage	86.2	Per cent
	Polio 3 immunization coverage	81.3	Per cent
	Measles immunization coverage	85.2	Per cent
	Fully immunization coverage	71.4	Per cent
	Antibiotic treatment of suspected pneumonia	29.2	Per cent
	Solid fuel use	98.8	Per cent
	HHS with at least one bednet	49.5	Per cent
	HHS with at least one insecticide-treated net (ITN)	35.0	Per cent
	Under-fives sleeping under bednets	29.0	Per cent
Under-fives sleeping under insecticide-treated nets (ITN)	23.0	Per cent	
<b>Environment</b>	Use of improved drinking water sources	74.2	Per cent
	Use of improved sanitation facilities	88.2	Per cent
<b>Reproductive health</b>	Contraceptive prevalence	41.7	Per cent
	Antenatal care	91.8	Per cent
	TT injection	84.4	Per cent
	Iron supplementation	80.2	Per cent
	Skilled attendant at delivery	53.6	Per cent
	Institutional deliveries	53.8	Per cent
<b>Education</b>	Net primary school attendance rate	81.5	Per cent
	Gender Parity Index	1.04	
<b>Child protection</b>	Child labour	28.8	Per cent
	Marriage before age 15 and age 18	10.6/50.2	Per cent
	Young women 15-19 currently married or in union	32.1	Per cent
<b>HIV/AIDS &amp; orphanhood</b>	Comprehensive knowledge about HIV prevention (15-24 women/men)	41.6/40.7	Per cent
	Condom use at last high-risk sex (15-24 women/men)	39.6/59.6	Per cent
	Children not living with a biological parent	17.4	Per cent
	Prevalence of orphans	12.6	Per cent
	School attendance of orphans versus non-orphans	0.97	



# BACKGROUND

## INTRODUCTION

This preliminary report is based on the Multiple Indicator Cluster Survey (MICS), conducted in Malawi in 2006 by the National Statistical Office (NSO). The survey was based, in large part, on the needs to monitor progress towards goals and targets emanating from recent international agreements: 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. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

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

The Government of Malawi (GoM) has been developing and implementing long and medium term strategies that translate the national and internal goals and objectives into a reality. In 2000, GoM launched the Malawi Vision 2020. This policy framework sets out a long-term development perspective for Malawi. In May 2002, the Government launched a 3-year Malawi Poverty Reduction Strategy (MPRS) which presented a first attempt to translate

long-term strategy of Malawi Vision 2020 into medium term focused action plans. The MPRS was built around four cross cutting issues: HIV/AIDS, gender, environment and science & technology besides the main goal of achieving sustainable poverty reduction through empowerment of the poor. The lessons learnt in the implementation of MPRS have resulted in the development of much more comprehensive policy namely the Malawi Growth and Development Strategy (MGDS) which aims at stimulating the economic growth.

Malawi remains committed to achieving the Millennium Development Goals (MDGs) localized to the Malawian context. The MDGs and the commitments made to the other international conventions are addressed in the MGDS with the targets and strategies. Some of key international conventions for which Malawi is signatory are – World Fit For Children, UNGASS on HIV/AIDS, Abuja targets on malaria, Convention on the Rights of the Children (CRC) and Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). A number of national policies and action plans have been prepared and being implemented to meet the goals set by the international community.

MICS would serve as one of the main monitoring tools by providing the necessary data at national, regional and district levels. The information gathered in MICS would serve as a baseline for the new initiatives and assess the success of the ongoing programmes. MICS also strengthens the M&E component of the new UNDAF 2008-2011 by providing the latest data on a number of key indicators related to GoM-UN programme of cooperation.

This preliminary report presents selected results on some of the principal topics covered in the survey and on a subset of indicators<sup>1</sup>. The results in this report are preliminary and are subject to change, although major changes are not expected. A comprehensive full report is scheduled for publication in April 2007.

Since MICS is aiming at providing the statistically significant results at the district level for the effective monitoring of development programmes in the district, it is envisaged to publish and disseminate separate district level reports for all the districts of the country. This exercise is planned to start from June 2007.

## **SURVEY OBJECTIVES**

Despite having a number of data sources, one of the challenges being faced by the policy makers and programme managers in Malawi is non availability of sub-national data. Many national and international agencies are interested in identifying districts with poor socio-economic status for intensive interventions but the present data sources are unable to meet this demand. They either provide district level data for a selected number of districts (MDHS) or calculated the district estimates based on a small sample sizes (IHS). In light of the decentralization of the governance and initiation of Malawi Growth and Development Strategy (MGDS), statistically significant district level estimates are warranted for a number of socio-economic indicators for planning the sub-national interventions by the District Assemblies and to provide baseline to measure the progress of these interventions over time.

A number of new intervention programmes have been implemented by the Government of Malawi in the recent past which will have an impact on indicators which are expected to change over a short period of time. These include immunization coverage, malaria

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<sup>1</sup> For more information on the definitions, numerators, denominators and algorithms of Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) indicators covered in the survey: see Chapter 1, Appendix 1 and Appendix 7 of the MICS Manual – *Multiple Indicator Cluster Survey Manual 2005: Monitoring the Situation of Children and Women*, also available at [www.childinfo.org](http://www.childinfo.org).

prevention methods, access to water and sanitation and knowledge on HIV/AIDS. Latest data on these indicators will help programme managers for better planning and monitoring of the development activities.

The primary objectives of 2006 Multiple Indicator Cluster Survey are:

- To provide up-to-date information *at the district level* for assessing the situation of children and women in Malawi;
  - To support the monitoring of Malawi Growth and Development Strategy (MGDS) indicators;
  - To furnish data needed for monitoring progress toward goals established by the Millennium Development Goals (MDGs), the goals of World Fit for Children (WFFC) and other internationally agreed upon goals, as a basis for future action;
  - To contribute to the improvement of data and monitoring systems in Malawi and to strengthen technical expertise in the design, implementation, and analysis of such systems.
-

# SAMPLING AND SURVEY METHODOLOGY

## SAMPLE SIZE

Since the objective of the MICS is to obtain estimates at the district level on key indicators related to the wellbeing of children and women, the district is taken as the universe. It is estimated that a sample of size of 1,200 households (HHs) is required per district to obtain statistically valid estimates at 95 per cent confidence interval for the majority of indicators.

Presently there are 28 districts in Malawi. However, two districts namely Likoma and Neno are too small to draw 1,200 HHs out of the total available HHs. Therefore Likoma has been merged with Nkhata Bay and Neno with Mwanza while drawing the sample. As a result, MICS has been conducted in 26 districts and results have been presented for 26 districts only. Weighted estimates for the three regions and Malawi as a whole have been obtained based on the data from the 26 districts.

## SAMPLE DESIGN

A two-stage sampling methodology was adopted in MICS to select the 1,200 HHs. Within each district, 40 census enumeration areas (clusters) were selected with probability proportional to size. A household listing was carried out within each cluster and a systematic sample of 30 households was drawn. For reporting results at the regional and national levels, samples were weighted to reflect population size. A total of 31,200 HHs (26 districts X 1,200 HHs) were selected in 1,040 clusters (26 districts X 40 clusters) under MICS. All the selected 1,040 clusters have been covered during the fieldwork period. MICS is thus one of the largest household surveys undertaken in Malawi.

## QUESTIONNAIRES

Four questionnaires were used in the survey namely household, children under five, women 15-49 and men 15-49. These questionnaires included the following modules:

The **Household Questionnaire** was administered to the head of the household or any person who was able to provide the information. It was used to identify all eligible persons for the specific form included. The modules are:

- Household Listing
- Education
- Water and Sanitation
- Household Characteristics
- Insecticide Treated Nets
- Orphan-hood
- Child Labour
- Salt Iodization

The **Children under Five Questionnaire** was administered to mothers or caretakers of children under 5 years of age<sup>2</sup> living in the households. Normally, the questionnaire was administered to mothers; in cases when 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:

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<sup>2</sup> The terms “children under 5”, “children age 0-4 years”, and “children aged 0-59 months” are used interchangeably in this report.

- Vitamin A
- Breastfeeding
- Care of Illness
- Malaria
- Immunization
- Anthropometry

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

- Child Mortality
- Birth History
- Tetanus Toxoid
- Maternal and Newborn Health
- Marriage/Union
- Contraception
- Sexual Behaviour
- HIV/AIDS
- Maternal Mortality

The **Individual Men Questionnaire** was administered to men aged 15-49 years in every third household selected for the survey and included the following modules:

- Marriage/Union
- Contraception
- Sexual Behaviour
- HIV/AIDS

The questionnaires are based on the global MICS model questionnaire. Under this survey, the global questionnaires were customized for Malawi needs, translated into Chichewa and Tumbuka and were pre-tested during the month of June 2006 in Chichewa and Tumbuka speaking areas and both urban and rural settings. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires.

## **FIELDWORK AND DATA PROCESSING**

The field staff was trained for 15 working days (3 weeks) during June/July 2006. The data were collected by 26 district level teams; each team comprised: four interviewers, one editor/measurer, one supervisor and a driver. Fieldwork took 4 months from mid-July to mid-November 2006. The fieldwork included house structure listing operation, household sample selection, interviewing the respondents and taking anthropometry measurements of children.

Data were entered on 20 microcomputers using the CSPro software. Forty data entry clerks were engaged into data entry exercise. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programs developed under the global MICS project and adapted to the Malawi questionnaire were used throughout. Data processing began in August 2006, simultaneously with the fieldwork, and finished by end of December 2006. Data were analysed with SPSS software using the model syntax and tabulation plans developed for this purpose.

## SAMPLE COVERAGE

<b>Results of household and individual interviews</b>						
Number of households, children under 5, women and men by results of the household, under-five's, women's and men's interviews and the response rates by residence and region, Malawi 2006.						
Result	Residence		Region			Total
	Urban	Rural	North	Central	South	
<b>Number of households</b>						
Sampled	3,489	27,711	6,000	10,800	14,400	31,200
Occupied	3,489	27,711	6,000	10,800	14,400	31,200
Interviewed	3,409	27,144	5,871	10,551	14,131	30,553
Response rate	97.7	98.0	97.9	97.7	98.1	97.9
<b>Number of children under 5</b>						
Eligible	2,367	20,871	4,622	8,536	10,080	23,238
Mother/Caretaker Interviewed	2,347	20,647	4,572	8,405	10,017	22,994
Response rate	99.2	98.9	98.9	98.5	99.4	98.9
<b>Number of women</b>						
Eligible	3,620	23,453	5,430	9,766	11,877	27,073
Interviewed	3,526	22,733	5,301	9,368	11,590	26,259
Response rate	97.4	96.9	97.6	95.9	97.6	97.0
<b>Number of men</b>						
Eligible	1,272	7,284	1,748	3,177	3,631	8,556
Interviewed	1,153	6,483	1,599	2,744	3,293	7,636
Response rate	90.6	89.0	91.5	86.4	90.7	89.2

Of the 31,200 households selected for the sample, all of them were found to be occupied. This is due the fact that the house listing operation and the canvassing of households have taken place at the same time. Of these, 30,553 were successfully interviewed for a household response rate of 97.9 per cent. For child questionnaire, 23,238 children under age five were listed in the household questionnaire. Of these, questionnaires were completed for 22,994 which correspond to a response rate of 98.9 per cent. In the interviewed households, 27,073 women (age 15-49) were identified. Of these, 26,259 were successfully interviewed, yielding a response rate of 97.0 per cent. In addition, 8,556 men (age 15-49) have been identified in every third household and 7,636 of them have been interviewed which gives a response rate of 89.2 per cent.

## PRELIMINARY RESULTS

### BACKGROUND CHARACTERISTICS

Table 1 show the per cent distribution (to determine appropriate weighting) and numbers of women age 15-49 and men age 15-49 interviewed in the MICS 2006 (unweighted) and their weighted numbers by background characteristics.

<b>Table 1 : Background characteristics of respondents:</b>						
Per cent distribution of women and men by background characteristics, Malawi 2006						
Background characteristic	Women			Men		
	Weighted per cent	Number weighted	Number un-weighted	Weighted per cent	Number weighted	Number un-weighted
<b>Region</b>						
Northern	10.9	2,857	5,301	11.4	869	1,599
Central	44.5	11,685	9,368	46.0	3,512	2,744
Southern	44.6	11,716	11,590	42.6	3,255	3,293
<b>Residence</b>						
Urban	13.8	3,629	3,526	15.0	1,144	1,153
Rural	86.2	22,630	22,733	85.0	6,492	6,483
<b>Age</b>						
15-19	19.8	5,196	5,226	20.7	1,583	1,622
20-24	24.0	6,315	6,285	19.4	1,482	1,514
25-29	19.0	4,996	4,893	18.1	1,379	1,376
30-34	14.1	3,712	3,738	15.2	1,163	1,136
35-39	9.6	2,527	2,540	10.8	827	815
40-44	7.5	1,962	2,009	8.6	659	642
45-49	5.9	1,550	1,568	7.1	544	531
<b>Marital/Union status</b>						
Currently married/in union	71.2	18,684	18,762	63.3	4,830	4,804
Formerly married/in union	12.6	3,317	3,321	4.0	303	272
Never married/in union	16.2	4,258	4,176	32.8	2,503	2,560
<b>Education</b>						
None	19.9	5,215	5,113	8.0	608	574
Primary	65.2	17,111	17,215	66.8	5,099	5,000
Secondary +	14.6	3,839	3,852	25.1	1,919	2,050
Non-standard curriculum	0.3	90	73	0.1	8	10
<b>Total</b>	<b>100.0</b>	<b>26,259</b>	<b>26,259</b>	<b>100.0</b>	<b>7,636</b>	<b>7,636</b>

Nearly 45 per cent of surveyed women were interviewed in the Central and Southern regions whereas 11 per cent in the Northern region. For men, a higher proportion was interviewed in the Central region whereas for Northern region, the distribution for men is similar to that of

women. Fourteen per cent of female respondents and 15 per cent of male respondents reside in urban households.

As expected, higher proportion of women and men are in the younger age groups. Nearly 63 per cent of women interviewed in MICS were between ages of 15 and 29, the corresponding proportion for men is 58 per cent. Among female respondents, 71 per cent are currently married or in union and 16 per cent have never been married whereas 63 per cent men are currently married and 33 per cent (double the rate for women) in never married group.

Regarding educational status, while the proportions of women and men with the primary education are similar, the proportion of women who have never attended school is 20 per cent compared to 8 per cent for men. It can also be seen that men are more likely (25 per cent) than women (15 per cent) to have reached secondary school.

## FERTILITY

In MICS 2006, birth histories of women age 15-49 who were interviewed have been obtained to measure the currently fertility situation in Malawi. In the birth history module, each woman was asked about the number of sons and daughters living with her, the number living elsewhere and the number who have died. Also information on every child has been obtained in terms of month and year in which each child is born, the child's name, sex, survival status and, if dead, the age at death.

<b>Table 2 : Current fertility</b>			
Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Malawi 2006			
Age group	Residence		Total
	Urban	Rural	
15-19	137	186	178
20-24	225	299	288
25-29	209	274	264
30-34	157	229	220
35-39	129	170	165
40-44	41	105	98
45-49	15	51	48
TFR	4.6	6.6	6.3
GFR	173	232	223
CBR	39.8	44.1	43.6

TFR: Total fertility rate for ages 15-49, expressed per woman.  
 GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women.  
 CBR: Crude birth rate, expressed per 1,000 population.  
 Note: Rates for age group 45-49 may be slightly biased due to truncation.

Table 2 provides the widely used current fertility measure namely the Total Fertility Rate (TFR) which is defined as the number of births a woman would have if she survived to age 50 and experienced the currently observed rates of age-specific fertility. In MICS, the 3-year period prior to the survey has been used to estimate the fertility.



The total fertility rate is estimated at 6.3 which indicate that if the fertility were to remain constant at the current levels measured in MICS, a woman in Malawi would have on an average, 6.3 children in her life time. This rate is significantly higher in rural areas (6.6) compared to urban areas (4.6).

The data also shows the age specific fertility is highest (288 births per 1,000 women or nearly 29% of women have a baby each year) among women in the age group 20-24. It can also be seen that fertility in the rural areas is higher than urban fertility for every age group.

## CHILD MORTALITY

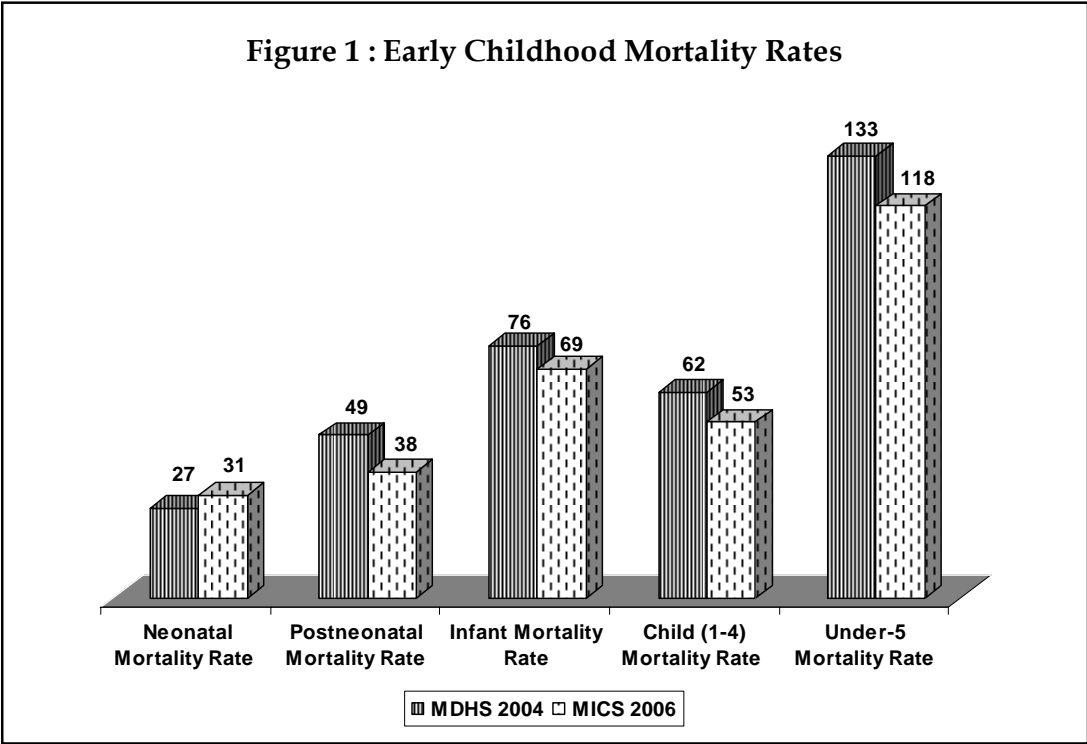
One of the overarching goals of the MDGs and the World Fit for Children is to reduce infant and under-five mortality. Monitoring progress towards this goal is an important but difficult objective. Measuring childhood mortality may seem easy, but attempts using direct questions, such as “Has anyone in this household died in the last year?” give inaccurate results. In MICS, childhood mortality rates are estimated using information recorded in the birth history module of the Women’s Questionnaire and provides a reliable estimate of mortality for the years preceding the date of the survey.

The *infant mortality rate* (IMR) is the probability of dying before the first birthday. The *under five mortality rate* (U5MR) is the probability of dying before the fifth birthday. While *neonatal mortality* (NN) is probability of death in the first month, *post neonatal mortality* (PNN) is the difference between infant mortality and neonatal mortality. *Child mortality* (CM) is defined as the probability of death between first and fifth birthday.

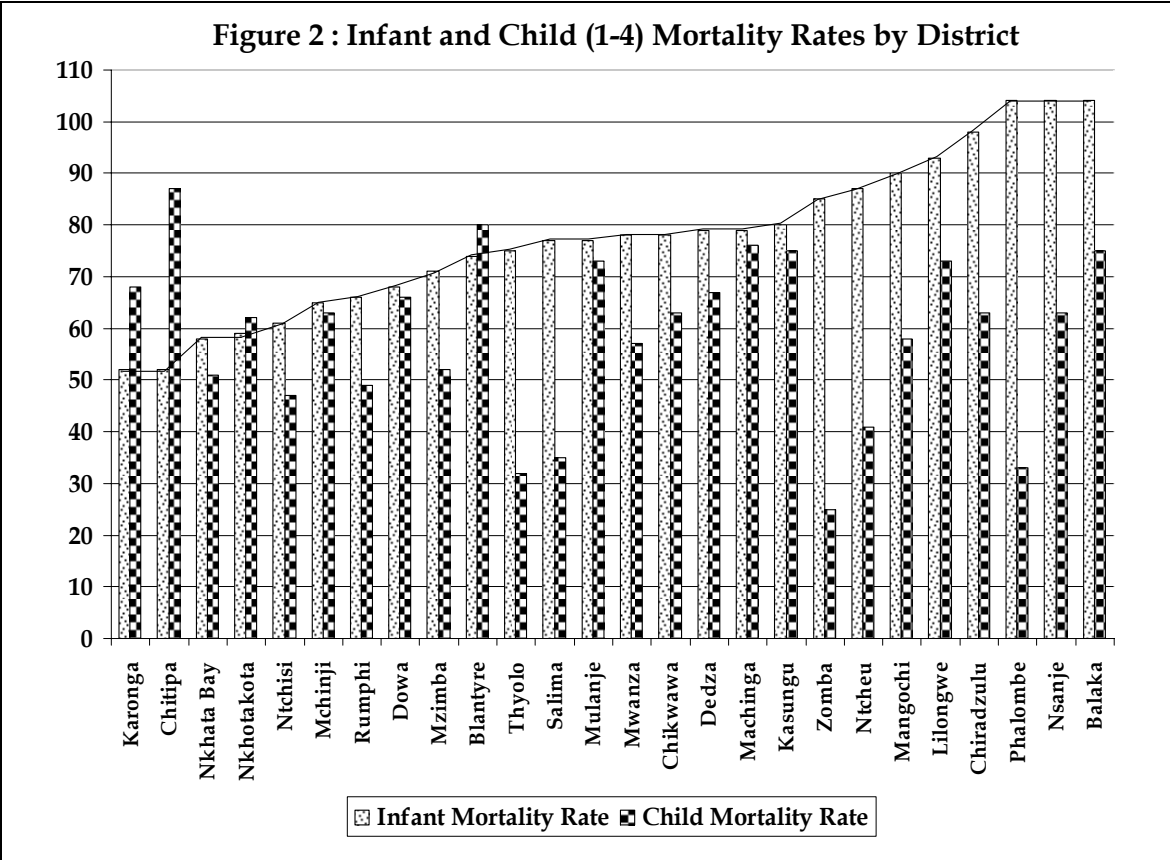
<b>Table 3 : Early childhood mortality rates</b>						
Neonatal, postneonatal, infant, child, and under-five mortality rates for <b>five-year</b> periods preceding the survey, Malawi 2006						
Years preceding the survey	Approximate calendar period	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
0-4	2002-2006	31	38	69	53	118
5-9	1997-2001	40	46	86	74	154
10-14	1992-1996	34	50	84	90	166

The data from MICS show that the infant mortality rate is estimated at 69 per thousand live births, while the probability of dying under-5 mortality rate is around 118 per thousand live births. Figure 1 shows a comparison of early childhood mortality rates from MICS 2006 with MDHS 2004.

One of the key purposes of MICS 2006 is to provide mortality estimates at the district level. To achieve this, each district has been assigned a sample size of 1,200 HHs so that a 10-year period (1997-2006) child mortality estimates would be available for all the districts. Annex 1 provides, for the first time in Malawi, a household survey based child mortality estimates for the 26 districts of the country.



This 10-year period estimates show that 50 per cent of the districts have infant mortality rates higher than the national average of 77. Three districts namely Balaka, Nsanje and Phalombe have IMR over 100. These are also the districts with U5MR above 150. Districts in the Northern region namely Chitipa, Karonga, Nkhata Bay, Rumphi have shown low levels of mortality rates compared to the other districts. This corroborates with the low mortality rates for the Northern region compared to Central and Southern regions.



In Figure 2, district level estimates of infant and child (1-4) mortality arranged by low to high rates of infant mortality. A wide variation in child (1-4) mortality rates can be observed amongst districts, indicating large differences in health care of young children.

## NUTRITION

### Nutritional Status

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

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

Table 4 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 4 per cent of children) and those whose measurements are outside a plausible range are excluded.

Almost two in ten children under age five in Malawi are moderately underweight (19.4%) and three per cent are classified as severely underweight (Table 4). Forty six per cent of children are stunted or too short for their age and three per cent are wasted or too thin for their height.

Children in the Central region are more likely to be underweight and stunted than other children. In contrast, the percentage wasted is highest in the Northern region. Those children whose mothers have secondary or higher education are the least likely to be underweight and stunted compared to children of mothers with no education. Boys appear to be slightly more likely to be underweight, stunted, and wasted than girls.

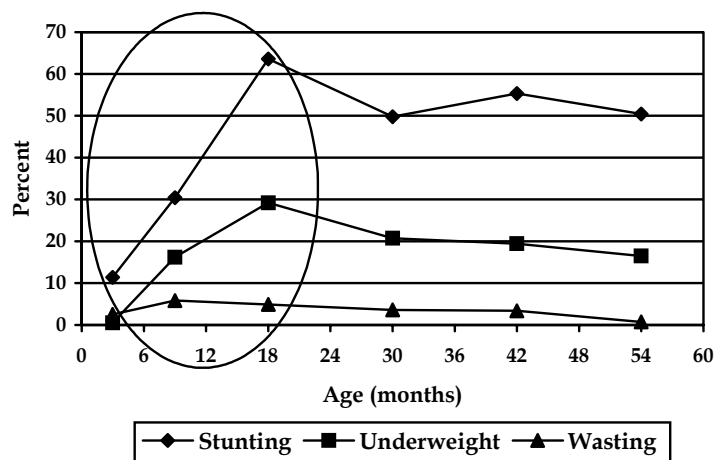
Nutritional status of children under 5 by districts is given in Annex 2. While 12 districts have stunting levels higher than the national average, in 7 districts, more than half of the child population are stunted.

<b>Table 4 : Child Malnutrition</b>							
Percentage of children aged 0-59 months who are severely or moderately malnourished, Malawi 2006							
Background characteristic	Height-for-age (Stunting)		Weight-for-height (Wasting)		Weight-for-age (Underweight)		Number of children
	% below - 3 SD	% below - 2 SD	% below - 3 SD	% below - 2 SD	% below - 3 SD	% below - 2 SD	
<b>Sex</b>							
Male	21.5	47.2	0.5	3.5	3.7	20.3	10,250
Female	19.5	44.5	0.4	3.1	3.2	18.5	10,497
<b>Region</b>							
Northern	14.6	39.7	0.8	4.4	2.7	16.7	2,294
Central	21.9	47.0	0.4	3.3	3.6	20.4	9,333
Southern	20.5	46.3	0.4	3.0	3.4	19.0	9,120
<b>Residence</b>							
Urban	14.8	36.9	0.5	3.3	2.5	16.4	2,318
Rural	21.2	47.0	0.5	3.3	3.6	19.8	18,430
<b>Age</b>							
< 6 months	2.3	11.1	0.5	3.7	0.1	1.9	1,637
6-11 months	9.6	29.2	0.3	4.5	2.9	15.7	2,349
12-23 months	25.0	55.0	0.9	5.4	5.6	26.2	4,516
24-35 months	22.0	49.9	0.4	2.8	4.2	23.3	4,839
36-47 months	24.7	51.8	0.3	1.9	2.8	18.8	4,306
48-59 months	23.3	49.2	0.3	1.7	2.2	16.1	3,100
<b>Mother's education</b>							
None	24.4	49.7	0.5	3.3	4.7	22.8	4,706
Primary	20.4	46.4	0.4	3.4	3.3	19.6	13,759
Secondary	12.7	34.6	0.5	2.6	1.6	11.2	2,220
Non-standard curriculum	22.4	37.6	0.0	3.7	5.4	17.9	47
<b>Wealth index quintile</b>							
Lowest	23.0	50.0	0.5	3.8	4.7	22.8	4,538
Second	22.2	48.7	0.3	2.6	3.6	20.5	4,347
Middle	21.4	46.8	0.5	3.3	3.5	20.3	4,369
Fourth	19.5	44.8	0.3	3.7	2.7	17.8	3,920
Highest	15.0	37.2	0.6	2.9	2.4	14.3	3,573
<b>Total</b>	<b>20.5</b>	<b>45.9</b>	<b>0.5</b>	<b>3.3</b>	<b>3.4</b>	<b>19.4</b>	<b>20,747</b>

The age pattern shows that deterioration in nutrition status takes place within first 2 years of life according to all three indices (Figure 3). This pattern is frequently seen and is related to the factors like initiation of complimentary foods before 6 months, inadequate and poor

quality of complimentary foods are given and are exposed to infections through water, food and the environment. There is a consensus that the damage to physical growth, brain development, and human capital formation that occurs during this period is extensive and largely irreversible. Therefore interventions must focus on this window of opportunity in the first two years of life. Any investments after this critical period are much less likely to improve nutrition.

**Figure 3 : Percentage of children aged 0-59 months who are undernourished, Malawi, 2006**



It is notable that wealth has little effect on the prevalence of malnutrition, with even the highest quintile having significant levels. This implies the resource constraints are not the major factor, but rather education of mother, behaviours and the environment are more important causes of malnutrition.

### 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 reliably available. The World Fit for Children goal states that children should be exclusively breastfed for 6 months and continued breastfeeding with safe, appropriate and adequate complementary feeding up to 2 years of age and beyond.

In Table 5, breastfeeding status is 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 shows exclusive breastfeeding of infants during the first six months of life (separately for 0-3 months and 0-5 months), as well as complementary feeding of children 6-9 months and continued breastfeeding of children at 12-15 and 20-23 months of age.

Approximately 56 per cent of children aged less than six months are exclusively breastfed, a level considerably lower than recommended. At age 6-9 months, 89 per cent of children are receiving breast milk and solid/mushy food. By age 12-15 months, 97 per cent of children are still being breastfed and by age 20-23 months, 73 per cent are still breastfed. Though there is no significant difference between boys and girls, exclusively breastfeeding rates are higher in urban areas compared to rural areas. Notably, mothers with higher education and greater wealth were seen to exclusively breast feed more than the uneducated and poor.

**Table 5 : Breastfeeding**

Percentage of living children according to breastfeeding status at each age group, Malawi 2006

Background characteristic	Children 0-3 months excl. breastfed	No. of children	Children 0-5 months excl. breastfed	No. of children	Timely complementary feeding rate*	No. of children	Children 12-15 months breastfed	No. of children	Children 20-23 months breastfed	No. of children
<b>Sex</b>										
Male	70.3	766	56.8	1,106	89.3	834	97.7	862	72.4	775
Female	71.8	775	56.0	1,207	88.8	851	97.2	903	74.2	810
<b>Region</b>										
Northern	62.0	156	51.6	231	84.8	166	97.4	180	76.3	185
Central	71.5	708	55.9	1,053	89.8	787	97.9	793	74.4	726
Southern	72.6	677	57.9	1,029	89.1	732	97.0	792	71.4	674
<b>Residence</b>										
Urban	80.8	194	65.4	273	88.1	206	95.1	182	63.4	170
Rural	69.6	1,348	55.2	2,041	89.1	1,480	97.7	1,582	74.6	1,416
<b>Mother's education</b>										
None	69.0	322	56.4	482	91.4	417	94.7	363	75.3	330
Primary	69.7	1,000	54.9	1,508	88.0	1,065	98.5	1,191	72.7	1,063
Secondary	80.3	212	63.1	316	90.0	196	96.0	208	73.1	187
Non-standard curriculum	17.1	2	14.0	3	100.0	4	100.0	3	84.5	5
<b>Wealth index quintile</b>										
Lowest	63.4	351	48.1	532	90.4	374	98.0	415	83.7	312
Second	68.4	309	53.8	492	85.4	352	97.9	356	71.2	377
Middle	67.7	319	55.4	480	89.3	380	97.1	398	69.3	306
Fourth	80.0	281	65.8	398	90.7	305	97.5	342	74.3	347
Highest	78.3	282	62.2	411	89.5	275	96.2	254	67.2	243
<b>Total</b>	<b>71.0</b>	<b>1,541</b>	<b>56.4</b>	<b>2,313</b>	<b>89.0</b>	<b>1,685</b>	<b>97.4</b>	<b>1,765</b>	<b>73.4</b>	<b>1,585</b>
* : Infants 6-9 months receiving breast milk & solid/mushy food										

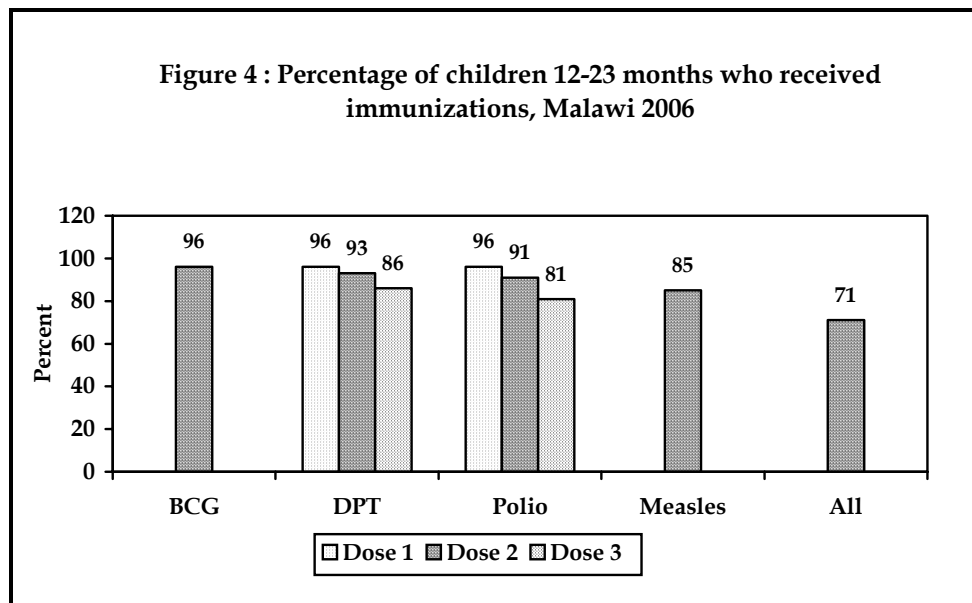
## CHILD HEALTH

### Immunization

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. Mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS questionnaire.

Wherever the immunization card is available, the information is recorded from the cards. If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT and Polio, how many times. The percentage of children aged 12 to 23 months who received each of the vaccinations is shown in Table 6.

<b>Table 6 : Vaccinations in first year of life</b>												
Percentage of children aged 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Malawi 2006												
Source of information	BCG	DPT HepB 1	DPT HepB 2	DPT 3 HepB 3	Polio 0	Polio 1	Polio 2	Polio 3	Measles	All*	None	No. of children aged 12-23 months
<b>Vaccinated at any time before survey</b>												
Vaccination card	75.6	76.4	75.3	73.5	24.9	76.5	75.4	73.1	66.8	65.4	0.3	4,979
Mother's report	19.9	19.8	17.8	12.7	11.1	19.2	15.5	8.2	18.4	6.0	2.3	4,979
<b>Either</b>	<b>95.5</b>	<b>96.2</b>	<b>93.1</b>	<b>86.2</b>	<b>36.0</b>	<b>95.7</b>	<b>90.9</b>	<b>81.3</b>	<b>85.2</b>	<b>71.4</b>	<b>2.5</b>	<b>4,979</b>
<b>Vaccinated by 12 months of age</b>												
	94.5	95.3	92.5	84.6	36.0	95.2	90.3	79.8	77.3	62.0	2.6	4,979
* BCG, measles and three doses of each of DPT- Hep B and Polio vaccine (excluding Polio 0 dose)												



The denominator for the Table 6 is comprised of children aged 12-23 months so that only children who are old enough to be fully vaccinated are counted. 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 lower portion of Table 6, only those who were vaccinated before their first birthday 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.

Approximately 96 per cent of children aged 12-23 months received a BCG vaccination and a same per cent were given the first dose of DPT. The percentage declines for subsequent doses of DPT to 93 per cent for the second dose, and 86 per cent for the third dose (Figure 4). Similarly, 96 per cent of children received Polio 1 and this declines to 81 per cent by the third dose. The coverage for measles vaccine is 85 per cent. Overall, 71 per cent of children age 12-23 months has received all the recommended vaccines and 2.5 per cent received none. The percentage of children who had all eight recommended vaccinations by their first birthday has increased to 62 per cent in the last two years compared to 51 per cent in MDHS 2004.

## Antibiotic treatment of suspected pneumonia

Pneumonia is one of the leading causes of death in children and the use of antibiotics in under-5s with suspected pneumonia is a key intervention. Children with suspected pneumonia are those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were due to a problem in the chest and a blocked nose. This question was limited to children who had suspected pneumonia within the previous two weeks and whether or not they had received an antibiotic within the previous two weeks.

Table 7 presents the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, region, residence, age, and socio-economic factors.

In Malawi, only 29 per cent of under-5 children with suspected pneumonia had received an antibiotic during the two weeks prior to the survey. The percentage was considerably higher in the urban areas, compared to rural Malawi. The table also shows that while antibiotic treatment of suspected pneumonia is low among the

poorest households, there is not much difference in the treatment levels between uneducated and educated mothers. The use of antibiotics is slightly higher for boys compared to girls suffering from pneumonia. Region-wise, higher proportion of children in Northern and Southern regions are likely to receive antibiotics compared to the Central region.

**Table 7 : Antibiotic treatment of pneumonia**

Percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment , Malawi 2006

Background character	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
<b>Sex</b>		
Male	31.0	876
Female	27.6	955
<b>Region</b>		
Northern	40.7	196
Central	23.2	1,004
Southern	35.2	631
<b>Residence</b>		
Urban	39.8	172
Rural	28.1	1,659
<b>Age</b>		
0-11 months	29.5	334
12-23 months	28.7	437
24-35 months	32.8	430
36-47 months	27.3	369
48-59 months	26.4	261
<b>Mother's education</b>		
None	27.1	440
Primary	30.4	1,220
Secondary	27.1	166
<b>Wealth index quintile</b>		
Lowest	24.3	461
Second	24.5	375
Middle	34.5	368
Fourth	32.6	355
Highest	32.4	271
<b>Total</b>	<b>29.2</b>	<b>1,831</b>



## Solid fuels

Cooking with solid fuels (biomass and coal) leads to high levels of indoor pollution and is a major cause of ill-health in the world, particularly among under-5 children, in the form of acute respiratory illness.

<b>Table 8 : Solid fuel use</b>							
Per cent distribution of households according to type of cooking fuel and percentage of households using solid fuels for cooking, Malawi 2006							
Background characteristic	Electricity	Wood	Charcoal	Other solid fuels	Total	Solid fuels for cooking	Number of HHs
<b>Region</b>							
Northern	1.2	94.7	3.7	0.3	100.0	98.7	3,243
Central	0.5	95.9	2.6	1.1	100.0	99.4	13,012
Southern	1.5	85.8	10.1	2.6	100.0	98.4	14,298
<b>Residence</b>							
Urban	7.8	48.1	43.4	0.5	100.0	91.9	3,508
Rural	0.2	96.6	1.4	1.9	100.0	99.7	27,045
<b>Wealth index quintile</b>							
Lowest	0.0	99.8	0.1	0.2	100.0	100.0	6,235
Second	0.0	99.6	0.2	0.2	100.0	100.0	6,443
Middle	0.0	99.0	0.1	0.9	100.0	99.9	6,182
Fourth	0.0	89.5	4.0	6.4	100.0	99.8	6,061
Highest	5.8	64.4	28.8	1.0	100.0	94.0	5,632
<b>Total</b>	<b>1.1</b>	<b>91.0</b>	<b>6.2</b>	<b>1.7</b>	<b>100.0</b>	<b>98.8</b>	<b>30,553</b>

Table 8 shows that a very high proportion of HHs in Malawi (98.8 per cent) use solid fuels for cooking. The use is almost universal in rural areas. Only the households belonging highest wealth index quintile have shown a modest use of electricity as type of cooking fuel (6 per cent).

## Malaria

Malaria is a leading cause of death of children under age five in Malawi. 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 and morbidity 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 should continue breastfeeding.

The MICS questionnaire incorporates questions on the use of bednets, both at household level and among children under five years of age. In Malawi, the results indicate that nearly 50 per cent of households have at least one bednet and 35 per cent insecticide treated.

<b>Table 9 : Children sleeping under bednets</b>					
Percentage of children aged 0-59 months who slept under an insecticide treated net during the previous night, Malawi 2006					
Background characteristic	% HHs with at least one bednet	% HHs with at least one ITN	Slept under a bednet	Slept under an ITN	Number of children aged 0-59 months
<b>Sex</b>					
Male	na	na	28.9	23.1	11,304
Female	na	na	29.0	23.0	11,687
<b>Region</b>					
Northern	57.6	36.4	34.4	23.7	2,436
Central	47.7	35.3	26.4	21.8	10,517
Southern	49.2	34.5	30.3	24.2	10,041
<b>Residence</b>					
Urban	72.2	53.8	52.1	42.9	2,489
Rural	46.5	32.6	26.1	20.6	20,505
<b>Age</b>					
0-11 months	na	na	32.2	26.4	4,947
12-23 months	na	na	30.3	23.7	4,979
24-35 months	na	na	28.2	21.9	5,157
36-47 months	na	na	27.2	21.9	4,601
48-59 months	na	na	25.8	20.2	3,310
<b>Wealth index quintile</b>					
Lowest	32.9	20.7	18.0	13.0	5,075
Second	40.4	28.0	23.7	18.6	4,770
Middle	51.0	35.7	28.4	22.5	4,881
Fourth	53.7	38.3	30.4	24.0	4,391
Highest	72.0	54.8	48.8	41.3	3,877
<b>Total</b>	<b>49.5</b>	<b>35.0</b>	<b>29.0</b>	<b>23.0</b>	<b>22,994</b>
Na : Not applicable					

Results indicate that 29 per cent of children under the age of five slept under any mosquito net the night prior to the survey and 23 per cent slept under an insecticide treated net (Table 9). ITN use among children under five declines steadily with age and the use are more than double in urban areas compared to rural.

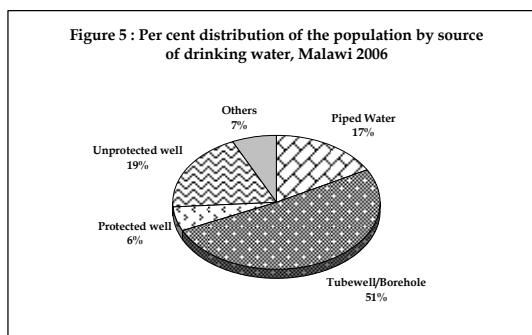
District level estimates on possession and use of bednets by households are given in Annex 3. By and large, districts where households own bednets, the usage rates are high. Chitipa has the lowest coverage with only one fifth of the households possessing nets and less than 5 per cent children are sleeping under a bednet.

## ENVIRONMENT

### Water

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

The distribution of the population by source of drinking water is shown in Table 10. The population using *improved drinking water sources* are those who use any of the following types of supply: piped water, public tap, borehole/tubewell, protected well or protected spring. Overall, 74 per cent of the population has access to improved drinking water sources – 96 per cent in urban areas and 71 per cent in rural areas. The situation in the Central is considerably worse than in other regions; only 67 per cent of the population in this region gets its drinking water from an improved source compared to nearly 80 per cent in Northern and Southern regions.



**Table 10 : Use of improved water sources**

Per cent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Malawi 2006

Background characteristic	Improved sources				Unimproved sources			Total	Improved sources of drinking water	Number of HH members
	Piped water	Tube Well/Bore hole	Protected well	Others	Unprotected well	Surface water	Others			
<b>Region</b>										
Northern	23.7	52.0	3.4	0.1	9.7	9.8	1.3	100.0	79.2	14,485
Central	9.5	49.3	7.9	0.2	27.0	5.2	0.9	100.0	66.9	59,024
Southern	22.1	53.4	4.7	0.2	13.7	4.6	1.3	100.0	80.4	58,332
<b>Residence</b>										
Urban	77.0	16.7	2.5	0.0	3.0	0.4	0.4	100.0	96.2	15,665
Rural	8.5	56.1	6.5	0.2	21.4	6.1	1.2	100.0	71.3	116,176
<b>Wealth index quintile</b>										
Lower	1.8	54.8	5.1	0.2	28.6	8.2	1.3	100.0	61.9	26,450
Second	2.6	59.9	5.9	0.2	24.3	6.1	1.0	100.0	68.6	26,391
Middle	11.9	52.8	7.2	0.2	20.7	5.8	1.4	100.0	72.1	26,417
Fourth	17.9	53.3	6.7	0.1	15.6	5.2	1.2	100.0	78.0	26,307
Highest	49.1	36.1	5.1	0.2	7.1	1.9	0.5	100.0	90.5	26,276
<b>Total</b>	<b>16.6</b>	<b>51.4</b>	<b>6.0</b>	<b>0.2</b>	<b>19.3</b>	<b>5.4</b>	<b>1.1</b>	<b>100.0</b>	<b>74.2</b>	<b>131,841</b>

The source of drinking water for the population varies strongly by region (Table 10). In the Central region, only 9.5 per cent of the population uses drinking water that is piped into their dwelling or into their yard or plot. In the Southern and Northern regions, 22 and 24 per cent respectively used piped water. There is a vast difference in the use of piped water between urban and rural.

Results in Annex 4 provide district level estimates on the use of improved water sources by population. In 7 districts, less than 10 per cent of population are accessing water from a piped source. Overall, three-fourths of population have access to improved sources of drinking water in the 17 districts; Chiradzulu reporting the highest coverage of 90 per cent.

## Sanitation

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. *Improved sanitation facilities* include: flush toilets connected to sewage systems, septic tanks or pit latrines, ventilated improved pit latrines and pit latrines. Eighty eight per cent of the population of Malawi is living in households using improved sanitation facilities (Table 11). This percentage is 97 in urban areas and 87 per cent in rural areas. Residents of the South are less likely than others to use improved facilities. Overall, 11 per cent of population in Malawi have no toilet facilities. The problem is more in rural areas (13 per cent) compared to urban areas (2 per cent).

<b>Table 11: Use of sanitary means of excreta disposal</b>									
Per cent 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, Malawi 2006									
Background characteristic	Improved sanitation facility			Unimproved or no facility		Total	Percentage population using sanitary excreta disposal		Number of HH members
	Flush/Pour Flush	Ventilated Improved Pit Latrine	Pit Latrine	Other	No facility or bush/field		Including Pit Latrine	Excluding Pit Latrine	
<b>Region</b>									
Northern	4.0	6.7	77.0	0.5	11.8	100.0	87.7	15.1	14,485
Central	1.7	9.3	78.5	0.7	9.8	100.0	89.5	14.0	59,024
Southern	2.5	11.9	72.4	0.1	13.0	100.0	86.8	20.0	58,332
<b>Residence</b>									
Urban	13.8	23.6	59.9	0.3	2.4	100.0	97.3	45.0	15,665
Rural	0.8	8.3	77.8	0.5	12.7	100.0	86.9	13.0	116,176
<b>Wealth index quintiles</b>									
Lowest	0.0	2.0	75.2	0.1	22.6	100.0	77.2	2.2	26,450
Second	0.0	4.0	79.0	0.8	16.1	100.0	83.0	5.3	26,391
Middle	0.0	10.2	78.8	0.5	10.5	100.0	89.0	13.1	26,417
Fourth	0.2	14.3	78.6	0.5	6.5	100.0	92.9	22.3	26,307
Highest	11.5	20.3	66.5	0.4	1.5	100.0	98.3	41.2	26,276
<b>Total</b>	<b>2.3</b>	<b>10.2</b>	<b>75.7</b>	<b>0.4</b>	<b>11.4</b>	<b>100.0</b>	<b>88.2</b>	<b>16.9</b>	<b>131,841</b>

## REPRODUCTIVE HEALTH

### Contraception

Current use of contraception was reported by 42 per cent of women currently married or in union (Table 12). The most popular method is the injections which are used by 29 per cent married women in Malawi. This is a considerable increase compared to 18 per cent reported in MDHS 2004. The next most popular method is female sterilization, which accounts for 5 per cent of married women. About two per cent use pills. Less than one per cent use periodic

**Table 12 : Use of contraception**

Percentage of women aged 15-49 years currently married or in union who are using (or whose partners is using) a contraceptive method, Malawi 2006

Background character	Not using any method	Modern methods								Traditional methods			Total	Any modern method	Any traditional method	Any method	Women currently married or in union
		Female sterilization	Male sterilization	Pill	IUD	Injections	Implants	Male Condom	Others	Periodic abstinence	Withdrawal	Other					
<b>Region</b>																	
Northern	60.5	5.2	0.1	5.5	0.3	14.5	1.1	5.4	0.2	0.5	6.0	0.6	100.0	32.3	7.2	39.5	2,109
Central	56.6	6.7	0.0	1.7	0.2	30.6	0.6	1.1	0.3	0.9	0.4	0.8	100.0	41.0	2.4	43.4	8,447
Southern	59.5	2.9	0.1	2.2	0.2	31.4	0.5	1.1	0.4	0.5	0.1	1.1	100.0	38.5	2.0	40.5	8,127
<b>Residence</b>																	
Urban	54.6	5.1	0.0	3.7	0.4	31.4	1.8	1.3	0.5	0.5	0.4	0.3	100.0	43.9	1.5	45.4	2,300
Rural	58.8	4.8	0.1	2.2	0.2	28.9	0.4	1.6	0.3	0.7	1.0	1.0	100.0	38.2	2.9	41.2	16,383
<b>Age</b>																	
15-19	75.9	0.0	0.0	1.6	0.1	17.1	0.3	3.4	0.1	0.2	0.7	0.5	100.0	22.5	1.7	24.1	1,667
20-24	57.5	0.1	0.0	2.6	0.1	34.3	0.5	2.3	0.3	0.5	0.9	0.9	100.0	39.9	2.6	42.5	4,987
25-29	53.3	0.9	0.1	2.8	0.2	37.7	0.9	1.4	0.3	0.6	0.8	0.9	100.0	44.2	2.5	46.7	4,164
30-34	55.8	4.3	0.0	2.7	0.4	31.5	1.0	1.2	0.4	0.8	1.1	0.9	100.0	41.1	3.1	44.2	3,058
35-39	56.5	10.7	0.1	2.5	0.4	24.9	0.3	1.1	0.5	0.9	1.5	0.8	100.0	40.0	3.5	43.5	2,085
40-44	56.5	19.0	0.2	1.5	0.1	18.4	0.4	0.3	0.1	1.1	0.7	1.8	100.0	39.9	3.6	43.5	1,561
45-49	67.2	18.5	0.0	0.8	0.2	10.3	0.4	0.1	0.1	0.6	0.4	1.3	100.0	30.3	2.4	32.8	1,162
<b>Number of living children</b>																	
0	97.1	0.0	0.0	0.3	0.0	1.4	0.1	0.7	0.0	0.2	0.1	0.0	100.0	2.7	0.2	2.9	1,501
1	65.2	0.5	0.0	2.2	0.1	26.4	0.3	3.1	0.3	0.6	0.7	0.5	100.0	32.6	2.1	34.8	3,568
2	52.5	1.3	0.1	3.1	0.2	37.4	1.1	1.8	0.4	0.5	0.8	0.8	100.0	45.1	2.4	47.5	3,761
3	50.2	2.9	0.0	2.5	0.2	38.9	0.8	1.2	0.3	0.6	1.3	1.1	100.0	46.5	3.3	49.8	3,193
4+	53.1	11.3	0.1	2.4	0.3	27.5	0.6	1.0	0.4	0.9	1.1	1.3	100.0	43.3	3.6	46.9	6,661
<b>Education</b>																	
None	62.9	6.3	0.1	1.3	0.2	25.7	0.2	0.6	0.5	0.5	0.4	1.4	100.0	34.3	2.8	37.1	4,197
Primary	58.7	4.6	0.0	2.2	0.2	29.4	0.5	1.6	0.5	0.7	1.1	0.9	100.0	38.5	2.9	41.3	12,277
Secondary +	47.4	3.3	0.1	5.5	0.5	35.4	2.1	3.4	0.5	0.7	1.0	0.2	100.0	50.5	2.1	52.6	2,126
Non-standard curriculum	59.3	18.0	0.0	2.3	0.0	17.6	0.0	0.0	0.4	0.0	0.0	2.3	100.0	38.0	2.8	40.7	82
<b>Wealth index quintiles</b>																	
Lowest	61.5	5.0	0.0	1.6	0.2	26.2	0.2	1.4	0.4	0.8	1.6	1.2	100.0	34.7	3.8	38.5	3,591
Second	59.6	4.7	0.0	1.5	0.2	28.5	0.5	1.8	0.4	0.8	0.9	1.2	100.0	37.1	3.3	40.4	3,670
Middle	58.7	3.7	0.0	1.9	0.2	30.6	0.4	1.5	0.4	0.6	0.9	1.4	100.0	38.2	3.1	41.3	4,024
Fourth	58.9	5.0	0.1	2.8	0.1	28.7	0.5	1.7	0.3	0.5	0.7	0.7	100.0	39.0	2.1	41.1	3,816
Highest	52.9	6.0	0.1	4.1	0.4	31.8	1.5	1.5	0.4	0.6	0.5	0.2	100.0	45.6	1.5	47.1	3,583
<b>Total</b>	<b>58.3</b>	<b>4.9</b>	<b>0.0</b>	<b>2.4</b>	<b>0.2</b>	<b>29.2</b>	<b>0.6</b>	<b>1.6</b>	<b>0.4</b>	<b>0.6</b>	<b>0.9</b>	<b>0.9</b>	<b>100.0</b>	<b>38.9</b>	<b>2.8</b>	<b>41.7</b>	<b>18,684</b>

abstinence, withdrawal, male sterilization, vaginal methods, or the lactational amenorrhea method (LAM). Overall, 58 per cent of currently married women have reported not using any contraceptive method.

Contraceptive prevalence is highest in the Central region at 43 per cent and almost the same in the Northern and Southern parts of the country (40 per cent). Use of modern contraceptive method is also high in Central region and lowest in Northern region. Contraception use slightly higher among urban women compared to rural women. Adolescents are far less likely to use contraception than older women. Only about 24 per cent of married or in union women aged 15-19 currently use a method of contraception compared to 43 per cent of 20-24 year and 47 per cent of 25-29 year olds.

Women's education level is strongly associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 37 per cent among those with no education to 53 per cent among women with secondary or higher education. Education is positively correlated with all modern methods, except for female sterilisation which is less among the educated.

## **Maternal Care**

For maternal care indicators, data was collected from mothers on all live births that occurred in the two years preceding the survey.

Table 13 shows that nearly 92 per cent of mothers received antenatal care from a health professional. Maternal age, urban-rural residence and level of education are not strongly related to use of antenatal care. Fully ten per cent more of women from Southern region received ANC compared to women in the Northern region.

Tetanus injections are given to pregnant women to prevent neonatal tetanus, a cause of early infant deaths. Table 13 shows that 84 per cent of women, who had a birth in the last two years preceding the date of interview, received at least one tetanus toxoid injection during the pregnancy. Women in urban areas, educated women and women in highest wealth quintile are more likely to have received tetanus toxoid injection. Regarding iron supplementation, 80 per cent of women reported receiving iron supplementation during their pregnancy.

The provision of delivery assistance by skilled attendants can greatly improve outcomes for mothers and infants by the use of technically appropriate procedures, and accurate and speedy diagnosis and treatment of complications. *Skilled assistance at delivery* is defined as assistance provided by a doctor, nurse or midwife.

About 54 per cent of births occurring in the two years prior to the MICS survey were delivered by skilled personnel (Table 13). This percentage is highest in the Northern region at 58 per cent and lowest in the Central at less than 50 per cent. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled person. There is a significant difference between deliveries by health professional in urban and rural regions. Fifty four per cent of births take place in a health facility. Births in Northern region, urban areas, to educated and wealthy women are more likely to take place in a health facility.

<b>Table 13 : Maternal care indicators by background characteristics</b>						
Percentage of women who had a live birth in the two years preceding the survey by selected maternal care indicators, Malawi 2006						
Background characteristic	Percentage with antenatal care from health professional	Percentage given at least one tetanus toxoid injection	Percentage given iron tablets	Percentage delivered by health professional	Delivered in health facility	Number of women who gave birth in the preceding two years
<b>Region</b>						
Northern	82.4	81.7	82.3	58.1	60.6	1,067
Central	92.0	85.1	78.5	49.7	49.7	4,714
Southern	93.7	84.2	81.5	56.8	56.5	4,429
<b>Residence</b>						
Urban	96.0	87.6	85.0	81.6	81.7	1,074
Rural	91.3	84.0	79.7	50.4	50.5	9,136
<b>Education</b>						
None	89.3	83.4	74.9	41.7	41.7	2,194
Primary	92.1	84.2	81.0	53.6	53.7	6,795
Secondary +	95.0	87.6	85.6	76.4	77.2	1,194
Non-standard curriculum	77.9	60.1	72.2	29.8	29.8	26
<b>Wealth index quintile</b>						
Lowest	89.6	84.3	80.7	42.1	42.5	2,307
Second	89.3	84.4	77.9	48.3	48.3	2,209
Medium	93.7	84.0	80.5	52.0	51.9	2,151
Fourth	92.6	85.7	78.7	55.1	55.6	1,920
Highest	94.6	83.3	84.3	77.9	77.8	1,623
<b>Total</b>	<b>91.8</b>	<b>84.4</b>	<b>80.2</b>	<b>53.6</b>	<b>53.8</b>	<b>10,210</b>

## EDUCATION

Universal access to basic education and the achievement of primary education by the world's children is one of the most important Millennium Development Goals and goals of 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, and for the improvement of health and nutrition of children.

Overall, 82 per cent of children of primary school age (6-13) in Malawi are attending primary school or secondary school (Table 14). In urban areas, 91 per cent of children attend school while in rural areas 80 per cent attend. However, the girls' primary school attendance ratio (82.1 per cent) is slightly higher than that of boys (78.6 per cent) in rural areas. School attendance in the Southern region (79 per cent) is significantly lower than in the Northern region (90 per cent) of the country.

**Table 14 : Primary school net attendance ratio**

Percentage of children of primary school age (6-13) attending primary or secondary school (NAR) and ratio of girls to boys attending primary education, Malawi 2006

Background characteristic	Boys		Girls		Total		Gender Parity Index (GPI)
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children	
<b>Region</b>							
Northern	89.3	1,833	91.2	1,862	90.3	3,695	1.02
Central	79.6	7,027	84.3	7,380	82.0	14,407	1.06
Southern	77.9	7,036	79.8	7,439	78.9	14,479	1.02
<b>Residence</b>							
Urban	91.2	1,730	90.0	1,870	90.6	3,601	0.99
Rural	78.6	14,165	82.1	14,811	80.4	28,980	1.05
<b>Age</b>							
6	47.5	2,485	55.3	2,537	51.4	5,022	1.16
7	71.5	2,026	76.7	2,097	74.2	4,125	1.07
8	83.5	1,989	84.8	2,165	84.2	4,154	1.02
9	87.7	1,943	89.6	1,926	88.6	3,869	1.02
10	88.5	2,144	90.6	2,132	89.6	4,278	1.02
11	92.5	1,479	92.4	1,619	92.4	3,099	1.00
12	90.6	2,182	91.6	2,304	91.1	4,487	1.01
13	89.5	1,647	91.4	1,899	90.6	3,547	1.02
<b>6-11</b>	<b>76.7</b>	<b>12,066</b>	<b>80.2</b>	<b>12,477</b>	<b>78.5</b>	<b>24,547</b>	<b>1.04</b>
<b>Mother's education</b>							
None	72.6	5,387	74.6	5,599	73.6	10,987	1.03
Primary	82.4	9,280	86.6	9,716	84.5	19,000	1.05
Secondary +	94.9	1,132	93.7	1,270	94.3	2,403	0.99
Non-standard curriculum	80.8	87	72.9	89	76.8	176	0.90
<b>Wealth index quintile</b>							
Lowest	73.2	3,270	78.2	3,400	75.7	6,672	1.07
Second	75.7	3,196	78.9	3,537	77.4	6,732	1.04
Middle	79.0	3,013	81.7	3,188	80.4	6,201	1.04
Fourth	82.1	3,300	85.0	3,206	83.5	6,509	1.04
Highest	90.2	3,117	91.7	3,349	91.0	6,466	1.02
<b>Total</b>	<b>80.0</b>	<b>15,896</b>	<b>83.0</b>	<b>16,680</b>	<b>81.5</b>	<b>32,581</b>	<b>1.04</b>

The ratio of girls to boys attending primary education is provided in the last column of Table 14. This shows that gender parity for primary school is 1.04 indicating no difference in the attendance of girls and boys to primary school.

District level net attendance ratios in Annex 5 show that three districts - Chitipa, Rumphi and Mzima - of the Northern region have more than 90 per cent primary school net



attendance ratios whereas the ratio is less than 80 per cent in 10 districts with Dedza having only 70 per cent of 6-13 yrs. children attending primary or secondary school.

## CHILD PROTECTION

### Child Labour

<b>Table 15 : Child labour</b>						
Percentage of children aged 5-14 years who are involved in child labour activities by type of work, Malawi 2006						
Background characteristic	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				
<b>Sex</b>						
Male	2.9	8.2	4.2	18.2	28.2	19,960
Female	2.8	10.5	7.0	14.8	29.3	20,858
<b>Region</b>						
Northern	0.8	10.0	6.7	19.9	32.7	4,629
Central	2.9	7.9	6.1	16.3	27.7	18,234
Southern	3.3	10.7	4.9	15.6	28.9	17,963
<b>Residence</b>						
Urban	1.4	4.6	4.3	7.0	15.7	4,545
Rural	3.0	9.9	5.8	17.6	30.4	36,281
<b>Age</b>						
5-11 years	3.1	11.9	3.3	18.3	30.4	29,258
12-14 years	2.3	3.0	11.7	11.7	24.6	11,567
<b>School participation</b>						
Attending school	3.0	9.9	6.1	18.1	31.1	32,693
Not attending school	2.3	7.1	3.7	10.0	19.7	8,133
<b>Wealth index quintile</b>						
Lowest	3.1	8.0	5.6	18.4	29.5	8,399
Second	3.4	11.8	6.2	18.4	32.8	8,314
Middle	3.1	11.5	5.7	18.9	32.9	7,881
Fourth	3.5	9.6	6.0	15.7	29.1	8,067
Highest	1.2	5.9	4.8	10.8	19.7	8,164
<b>Total</b>	<b>2.8</b>	<b>9.4</b>	<b>5.6</b>	<b>16.4</b>	<b>28.8</b>	<b>40,826</b>
* : Proportion of children 5-14 years of age who are currently working (paid or unpaid; inside or outside home), more than 4 hours per day.						

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 and 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:

- Ages 5-11: at least 1 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 differentiating child labour from 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 before. Table 15 presents the results of child labour by the type of work.

Table 15 shows that the total child labour rate in Malawi is nearly 29 per cent, eight per cent points lower than that reported in MDHS 2004 (37 per cent). Children in Northern region are more in labour, though mostly engaged in unpaid work and family business. There is no difference in the total child labour rates between boys and girls but children engaged in work in the rural areas almost double the number of children working in urban areas. Nearly one third of working children are able to attend school. Children belonging to higher wealth quintile are less likely involved in child labour, but still, one in five is.

### **Age at 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 20-24 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.

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. Women married at younger ages are more likely to dropout of school, experience higher levels of fertility, domestic violence, and maternal mortality.

The percentage of women married at various ages is provided in Table 16. Two of the indicators are to estimate the percentage of women married before 15 years of age and percentage married before 18 years of age. Nearly 11 per cent of women aged 15-49 years were in marriage or in union before their 15<sup>th</sup> birthday with higher proportions in rural and lower literacy groups. Half of the Malawian women aged 20-49 reported married or in union before their 18<sup>th</sup> birthday. Malawi, in the absence of registration of births and marriages act has a daunting task in rising the age at marriage for girls. It is notable, however that while wealth showed little influence on the age of marriage, far fewer girls who attended secondary school married at a young age. Thus, schooling offers a key strategy to delayed marriage as well as numerous other benefits.

**Table 16 : Early marriage**

Percentage of women aged 15-49 years in marriage or union before their 15<sup>th</sup> birthday, percentage of women aged 20-49 years in marriage or union before their 18<sup>th</sup> birthday, Malawi 2006

Background characteristic	Percentage married before age 15	Number of women aged 15-49 years	Percentage married before age 18	Number of women aged 20-49 years	Percentage of women 15-19 years married/ in union	Number of women aged 15-19 years
<b>Region</b>						
Northern	10.8	2,857	52.6	2,256	40.0	602
Central	9.1	11,685	46.7	9,427	26.5	2,268
Southern	12.0	11,716	53.1	9,392	35.5	2,326
<b>Residence</b>						
Urban	8.1	3,629	39.9	2,818	23.5	814
Rural	11.0	22,630	51.8	18,257	33.7	4,382
<b>Age</b>						
15-19	5.7	5,196	56.0	12	32.1	5,196
20-24	9.7	6,315	50.6	6,315	-	0
25-29	12.2	4,996	49.7	4,996	-	0
30-34	12.2	3,712	49.9	3,712	-	0
35-39	14.1	2,527	49.3	2,527	-	0
40-44	13.6	1,962	54.7	1,962	-	0
45-49	11.8	1,549	46.4	1,549	-	0
<b>Education</b>						
None	17.3	5,215	56.2	4,960	53.6	255
Primary	10.4	17,111	54.8	13,102	34.2	4,016
Secondary +	2.2	3,839	18.8	2,920	16.8	924
Non-standard curriculum	18.5	90	62.6	90	-	0
<b>Wealth index quintile</b>						
Lowest	11.4	5,166	51.8	4,197	33.6	970
Second	11.1	5,167	53.1	4,189	40.0	982
Middle	11.7	5,212	53.8	4,224	39.9	989
Fourth	11.2	5,114	52.5	4,142	32.5	973
Highest	7.9	5,600	40.2	4,322	18.5	1,282
<b>Total</b>	<b>10.6</b>	<b>26,259</b>	<b>50.2</b>	<b>21,075</b>	<b>32.1</b>	<b>5,196</b>

## HIV/AIDS & ORPHANHOOD

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 toward raising awareness and giving young people the tools to protect them 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).

<b>Table 17 : Comprehensive knowledge about HIV Prevention</b>				
Percentage of adults aged 15-49 years who have comprehensive knowledge about HIV prevention, Malawi 2006				
Background characteristic	Have comprehensive knowledge* (identify 2 prevention methods and 3 misconceptions)			
	Women		Men	
	Per cent	Number	Per cent	Number
<b>Region</b>				
Northern	36.9	2,857	42.6	869
Central	34.2	11,685	29.9	3,512
Southern	47.3	11,716	50.6	3,255
<b>Residence</b>				
Urban	54.9	3,629	51.0	1,144
Rural	38.0	22,630	38.3	6,492
<b>Age</b>				
15-19	41.0	5,196	41.0	1,583
20-24	42.0	6,315	40.4	1,482
<b>15-24</b>	41.6	11,511	40.7	3,064
25-29	44.3	4,996	39.4	1,379
30-34	37.7	3,712	42.9	1,163
35-39	37.1	2,527	39.8	827
40-44	35.8	1,962	37.5	659
45-49	36.0	1,549	37.4	544
<b>Education</b>				
None	31.4	5,215	29.7	608
Primary	39.9	17,111	37.3	5,099
Secondary +	54.6	3,839	51.3	1,919
Non-standard curriculum	40.2	90	6.2	8
<b>Wealth index quintile</b>				
Lowest	32.3	5,166	31.5	1,188
Second	36.3	5,167	38.8	1,403
Middle	37.4	5,212	38.5	1,607
Fourth	42.9	5,114	39.7	1,666
Highest	51.9	5,600	49.1	1,771
<b>Total</b>	<b>40.3</b>	<b>26,259</b>	<b>40.2</b>	<b>7,636</b>
*: Respondents with comprehensive knowledge say that use of condom for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, say that a health-looking person can have the AIDS virus, and reject the two most common local misconceptions (mosquito bites & supernatural means).				

A key indicator used to measure countries' responses to the HIV epidemic is the proportion of young people 15-24 years who know two methods of preventing HIV reject two most common misconceptions in Malawi (that HIV can be transmitted by mosquito bites and supernatural means) and know that a healthy looking person can have HIV. Table 17 shows that around 41 per cent young women and men 15-24 years have comprehensive correct knowledge of HIV. Level of education and residence are highly associated with knowledge

of HIV. It can also be seen from the table that knowledge among adult women and men aged 15-49 years is also same.

Annex 6 provides the district level knowledge levels among women and men about HIV prevention. While Mulanje has an equally highest level of knowledge for both women and men, in Balaka, Mwanza, Zomba, less number of women are knowledgeable compared to men.

Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially with non-regular partners is very important for reducing the spread of HIV. Over half of new HIV infections are among young people 15-24 years, thus a change in behaviour among this age group will be especially important to reduce new infections.

<b>Table 18 : Condom use at last high-risk sex - Women</b>								
Percentage of young women aged 15-24 years who had high risk sex in the previous year and who used a condom in last high risk sex, Malawi 2006								
Background characteristic	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in the last 12 months	Number of women aged 15-24	Per cent who had sex with non-marital, non-cohabiting partner	Number of women aged 15-24 years who had sex in last 12 months	Per cent who used a condom at last sex with a non-marital, non-cohabiting partner	Number of women aged 15-24 years who had sex in last 12 months with a non-marital, non-cohabiting partner
<b>Region</b>								
Northern	72.7	65.4	1.0	1,259	7.7	824	51.8	63
Central	72.5	67.0	2.0	5,114	13.1	3,426	37.3	450
Southern	79.8	72.5	1.2	5,126	15.8	3,716	40.0	586
<b>Residence</b>								
Urban	71.6	63.0	0.6	1,719	23.5	1,083	51.9	255
Rural	76.5	70.4	1.7	9,780	12.3	6,884	35.8	845
<b>Age</b>								
15-19	51.4	45.7	1.7	5,196	27.6	2,377	38.4	655
20-24	95.9	88.7	1.4	6,302	8.0	5,590	41.3	445
<b>Education</b>								
None	91.0	86.0	1.5	927	7.7	797	23.8	62
Primary	75.5	70.0	1.7	8,342	11.7	5,842	36.3	685
Secondary +	70.5	59.5	1.0	2,222	26.6	1,322	48.8	352
<b>Wealth index quintile</b>								
Lowest	75.6	70.3	2.2	2,250	11.1	1,581	27.3	175
Second	82.7	75.9	2.0	2,261	13.0	1,716	33.6	223
Middle	80.7	76.1	2.0	2,318	11.0	1,764	45.8	195
Fourth	74.7	69.1	0.4	2,183	11.6	1,508	33.1	174
Highest	66.2	56.2	1.0	2,486	23.8	1,396	49.7	333
<b>Total</b>	<b>75.8</b>	<b>69.3</b>	<b>1.5</b>	<b>11,498</b>	<b>13.8</b>	<b>7,966</b>	<b>39.6</b>	<b>1,100</b>

**Table 19 : Condom use at last high-risk sex - Men**

Percentage of young men aged 15-24 years who had high risk in the previous year and who used a condom in last high risk sex, Malawi 2006

Background characteristic	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in the last 12 months	Number of men aged 15-24	Per cent who had sex with non-marital, non-cohabiting partner	Number of men aged 15-24 years who had sex in last 12 months	Per cent who used a condom at last sex with a non-marital, non-cohabiting partner	Number of men aged 15-24 years who had sex in last 12 months with a non-marital, non-cohabiting partner
<b>Region</b>								
Northern	62.1	51.0	2.6	360	54.3	183	63.3	99
Central	66.4	48.3	4.4	1,382	51.4	667	57.5	343
Southern	70.3	58.7	7.1	1,323	61.9	777	60.4	481
<b>Residence</b>								
Urban	68.5	46.3	5.7	469	70.3	217	69.1	153
Rural	67.4	54.3	5.2	2,596	54.6	1,410	57.8	770
<b>Age</b>								
15-19	46.9	32.2	3.9	1,583	90.9	509	58.1	463
20-24	89.7	75.5	6.8	1,482	41.1	1,118	61.2	460
<b>Education</b>								
None	74.5	71.1	5.9	82	39.6	58	42.7	23
Primary	64.6	52.1	5.2	2,222	54.1	1,157	56.0	626
Secondary +	75.5	54.3	5.6	759	66.6	412	69.2	274
<b>Wealth index quintile</b>								
Lowest	65.8	56.5	3.1	466	44.4	263	66.5	117
Second	72.9	55.7	5.8	559	49.8	311	58.4	155
Middle	70.8	58.8	5.6	605	52.2	355	53.4	186
Fourth	63.5	51.0	6.6	674	57.3	344	54.0	197
Highest	65.8	46.5	5.0	760	75.9	353	65.7	268
<b>Total</b>	<b>67.6</b>	<b>53.1</b>	<b>5.3</b>	<b>3,064</b>	<b>56.7</b>	<b>1,627</b>	<b>59.6</b>	<b>923</b>

Condom use during sex with live-in partners (non-marital, non-cohabiting) was assessed in women and men of 15-24 years of age who had sex with such a partner in the previous year (Table 18 & 19). Nearly 14 per cent of women 15-24 years report having sex with a non-regular partner in the 12 months prior to the MICS. Of them, 40 per cent report using a condom when they had sex with the high risk partner. Among men, 57 per cent engaged in high risk sex and nearly 60 per cent of them report using a condom when they had sex with the high risk partner. Urban-Rural differentials and level of education have been correlated to the use of condom in high risk sex practice.

As the HIV epidemic progresses, more and more children are becoming orphaned due to AIDS. Children who are orphaned or living away from their parents may be at increased risk of neglect or exploitation if the parents are not available to assist them. Monitoring the variations in educational outcomes for children who have lost both parents (double orphans) versus children whose parents are alive (and who live with at least one of these parents) is

one way to ensure that children's rights are being met even after their parents have died or are no longer able to care for them.

<b>Table 20: Children's living arrangements and orphanhood</b>								
Per cent distribution of children aged 0-17 years according to living arrangements & orphanhood, Malawi 2006								
Background characteristic	Living with both parents	Living with mother only	Living with father only	Children not living with a biological parent	Impossible to determine	Total	Prevalence of orphans*	Number of children
<b>Sex</b>								
Male	60.1	19.9	3.0	16.4	0.7	100.0	12.9	35,052
Female	59.1	19.5	2.3	18.4	0.7	100.0	12.2	35,656
<b>Region</b>								
Northern	59.8	16.8	5.0	17.6	0.8	100.0	11.2	7,809
Central	65.1	17.0	2.6	14.7	0.6	100.0	10.2	31,870
Southern	53.9	23.1	2.0	20.3	0.7	100.0	15.3	31,040
<b>Residence</b>								
Urban	57.7	17.6	3.9	19.7	1.0	100.0	14.5	8,009
Rural	59.8	20.0	2.4	17.1	0.6	100.0	12.3	62,710
<b>Age</b>								
0-4 years	74.1	20.7	0.6	4.4	0.2	100.0	3.3	22,971
5-9 years	59.3	19.6	2.7	17.9	0.4	100.0	11.3	21,882
10-14 years	49.0	18.9	4.3	27.1	0.6	100.0	20.8	18,941
15-17 years	41.4	18.5	4.2	32.9	3.0	100.0	24.8	6,925
<b>Wealth index quintile</b>								
Lowest	57.3	24.9	2.1	15.2	0.6	100.0	11.8	14,678
Second	57.0	23.3	1.5	17.5	0.6	100.0	13.1	14,366
Middle	64.7	17.3	2.3	15.2	0.5	100.0	10.7	14,041
Fourth	61.1	16.8	3.0	18.6	0.7	100.0	13.3	13,901
Highest	58.1	15.6	4.3	20.9	1.0	100.0	14.1	13,734
<b>Total</b>	<b>59.6</b>	<b>19.7</b>	<b>2.6</b>	<b>17.4</b>	<b>0.7</b>	<b>100.0</b>	<b>12.6</b>	<b>70,719</b>

\* : Children with at least one dead parent

In Malawi, nearly 13 per cent of children aged 0-17 are orphans meaning they have lost one or both parents (Table 20). The prevalence of orphans is high in Southern region (15.3 per cent) and low in the Central region (10.2 per cent). The table also shows that 17.4 per cent children are not living with a biological parent.

Table 21 provides schooling of children aged 10-14 years by orphanhood. Among children 10-14 who are orphans, 89 per cent are currently attending school. Among the children ages 10-14 who are *not* orphans, 91 per cent are attending school. The table also shows that ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years is 0.97 in MICS. This indicates a rather good response of caretakers insuring that even orphans are in school along with peers whose parents are alive.

<b>Table 21 : Schooling of children age 10-14 by orphanhood</b>						
School attendance of children aged 10-14 years by orphanhood, Malawi 2006						
Background characteristic	Per cent of children who are orphaned	School attendance of children who are orphaned	Per cent of children who are not orphans	School attendance of children who are not orphans	School attendance of orphans versus non-orphans	Total number of children aged 10-14 years
<b>Sex</b>						
Male	26.3	87.3	73.7	90.8	0.96	9,169
Female	25.9	90.3	74.1	91.4	0.99	9,768
<b>Region</b>						
Northern	23.1	95.3	76.9	96.7	0.99	2,138
Central	21.4	87.6	78.6	91.3	0.96	8,646
Southern	32.0	88.5	68.0	89.2	0.99	8,156
<b>Residence</b>						
Urban	28.3	93.7	71.7	94.0	1.00	2,235
Rural	25.9	88.1	74.1	90.7	0.97	16,706
<b>Wealth index quintile</b>						
1	24.2	85.4	75.8	87.1	0.98	3,729
2	26.4	84.9	73.6	89.3	0.95	3,753
3	25.2	88.2	74.8	90.8	0.97	3,462
4	27.9	90.2	72.1	92.7	0.97	3,856
5	26.8	94.3	73.2	95.3	0.99	4,141
<b>Total</b>	<b>26.1</b>	<b>88.6</b>	<b>73.9</b>	<b>91.0</b>	<b>0.97</b>	<b>18,941</b>



## ANNEXES

### Annex 1 : Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for the <b>10-year period</b> preceding the survey, Malawi 2006					
Area	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
<b>Region</b>					
Northern	35	28	63	41	101
Central	34	40	74	72	141
Southern	37	47	84	56	136
<b>District</b>					
Balaka	39	65	104	63	160
Blantyre	30	43	74	51	121
Chikwawa	33	45	78	75	147
Chiradzulu	47	51	98	67	159
Chitipa	31	21	52	49	99
Dedza	43	36	79	87	160
Dowa	36	32	68	76	139
Karonga	28	24	52	32	83
Kasungu	30	50	80	57	132
Lilongwe	49	44	93	80	166
Machinga	43	36	79	41	117
Mangochi	24	66	90	66	150
Mchinji	24	41	65	73	133
Mulanje	39	39	77	33	107
Mwanza	41	37	78	63	137
Mzimba	44	27	71	47	115
Nkhata Bay	21	37	58	25	81
Nkhotakota	22	36	59	63	118
Nsanje	39	64	104	75	171
Ntcheu	31	55	87	68	149
Ntchisi	27	34	61	62	119
Phalombe	40	64	104	63	161
Rumphi	34	33	66	35	99
Salima	34	43	77	73	144
Thyolo	26	49	75	52	123
Zomba	48	36	85	58	138
<b>Malawi</b>	<b>35</b>	<b>42</b>	<b>77</b>	<b>63</b>	<b>134</b>

## Annex 2 : Nutritional status

Percentage of children aged 0-59 months who are severely or moderately malnourished, Malawi 2006							
Area	Height-for-age (Stunting)		Weight-for-height (Wasting)		Weight-for-age (Underweight)		Number of children
	% below - 3 SD	% below - 2 SD	% below - 3 SD	% below - 2 SD	% below - 3 SD	% below - 2 SD	
<b>Region</b>							
Northern	14.6	39.7	0.8	4.4	2.7	16.7	2,294
Central	21.9	47.0	0.4	3.3	3.6	20.4	9,333
Southern	20.5	46.3	0.4	3.0	3.4	19.0	9,120
<b>District</b>							
Balaka	14.0	40.5	0.5	2.3	2.5	14.5	505
Blantyre	16.3	41.8	0.1	1.1	2.2	14.6	1,509
Chikwawa	17.1	39.7	1.1	6.2	4.7	22.7	666
Chiradzulu	17.5	45.7	0.6	5.3	3.4	18.3	641
Chitipa	14.4	38.8	0.7	4.7	3.8	19.5	316
Dedza	28.1	57.0	1.1	4.6	5.8	29.1	412
Dowa	20.0	42.5	0.4	3.3	3.8	18.1	2,946
Karonga	11.8	30.1	1.5	7.9	1.4	13.4	427
Kasungu	18.9	46.7	0.2	1.9	3.1	18.2	1,021
Lilongwe	22.6	46.3	0.8	5.0	4.3	24.1	1,077
Machinga	28.6	57.0	0.1	2.3	5.1	22.6	1,258
Mangochi	19.9	44.6	0.1	1.7	4.0	22.2	817
Mchinji	30.3	56.9	0.1	2.9	3.1	20.6	1,215
Mulanje	18.8	42.4	0.4	3.1	2.4	15.9	562
Mwanza	20.8	50.8	0.1	1.9	2.9	18.6	412
Mzimba	16.4	46.1	0.5	3.1	3.1	18.3	995
Nkhata Bay	15.6	37.5	1.5	6.3	3.4	15.6	264
Nkhotakota	21.2	44.3	0.5	3.7	3.8	21.4	402
Nsanje	13.4	38.4	0.9	4.4	4.1	24.6	389
Ntcheu	22.6	50.9	0.2	3.4	3.1	21.7	819
Ntchisi	29.0	56.0	0.2	1.5	3.9	21.9	477
Phalombe	23.3	46.7	0.4	4.0	3.4	20.2	441
Rumphi	11.8	35.0	0.6	1.9	1.9	14.0	293
Salima	13.2	37.9	0.4	3.1	2.6	19.2	964
Thyolo	22.8	47.5	1.0	4.8	3.3	19.5	977
Zomba	24.6	51.4	0.4	2.4	3.1	17.6	941
<b>Malawi</b>	<b>20.5</b>	<b>45.9</b>	<b>0.5</b>	<b>3.3</b>	<b>3.4</b>	<b>19.4</b>	<b>20,747</b>

### Annex 3 : Bednets coverage

Percentage of children aged 0-59 months who slept under an insecticide treated net during the previous night, Malawi 2006						
Area	% HHs with at least one bednet	% HHs with at least one ITN	No. of HHs	Slept under a bednet	Slept under an insecticide treated net	Number of children aged 0-59 months
<b>Region</b>						
Northern	57.6	36.4	3,243	34.4	23.7	2436
Central	47.7	35.3	13,012	26.4	21.8	10,517
Southern	49.2	34.5	14,298	30.3	24.2	10,041
<b>District</b>						
Balaka	63.3	46.6	720	38.4	29.5	525
Blantyre	54.7	41.4	2,398	39.5	33.1	1,606
Chikwawa	54.1	36.1	1,178	34.5	27.3	843
Chiradzulu	37.5	30.0	972	22.6	20.4	703
Chitipa	35.4	20.7	370	6.9	4.6	329
Dedza	39.8	30.7	570	22.5	18.2	448
Dowa	37.6	27.7	4,360	14.7	12.5	3,379
Karonga	76.9	39.3	625	73.1	41.2	473
Kasungu	52.1	31.8	1,135	21.2	16.8	1,080
Lilongwe	53.3	41.0	1,399	33.4	27.2	1,152
Machinga	52.4	30.3	1,921	20.9	14.0	1,378
Mangochi	63.0	42.6	1,046	37.3	27.9	890
Mchinji	52.1	42.1	1,836	36.6	31.1	1,453
Mulanje	26.3	22.1	1,221	26.4	22.2	666
Mwanza	45.6	21.2	534	25.5	20.0	433
Mzimba	55.6	39.4	1,512	30.4	25.6	1,047
Nkhata Bay	53.9	30.2	399	28.0	15.0	284
Nkhotakota	70.2	51.3	510	54.4	41.5	453
Nsanje	52.9	38.1	568	43.1	32.0	425
Ntcheu	48.3	36.2	1,186	21.9	18.7	888
Ntchisi	29.6	22.7	630	15.4	12.9	504
Phalombe	57.8	28.7	666	27.4	21.4	503
Rumphi	60.1	41.6	337	23.7	18.8	302
Salima	67.3	48.9	1,385	44.4	36.2	1,160
Thyolo	30.6	23.3	1,497	20.5	17.3	1,068
Zomba	56.7	45.2	1,579	31.1	26.4	1,002
<b>Malawi</b>	<b>49.5</b>	<b>35.0</b>	<b>30,553</b>	<b>29.0</b>	<b>23.0</b>	<b>22,994</b>

## Annex 4 : Use of improved water sources

Per cent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Malawi 2006						
Area	Piped Water	Tube well/ Borehole	Protected well	Others	Improved Sources	Number of household members
<b>Region</b>						
Northern	23.7	52.0	3.4	0.1	79.2	14,485
Central	9.5	49.3	7.9	0.2	66.9	59,024
Southern	22.1	53.4	4.7	0.2	80.4	58,332
<b>District</b>						
Balaka	21.8	50.2	14.3	0.0	86.3	3,103
Blantyre	56.3	30.4	1.2	0.0	87.9	10,322
Chikwawa	16.1	54.9	1.2	0.0	72.2	5,035
Chiradzulu	1.7	86.4	1.9	0.0	90.0	3,855
Chitipa	15.4	48.6	1.9	0.3	66.2	1,705
Dedza	3.2	52.9	5.8	0.3	62.2	2,483
Dowa	1.6	48.9	9.5	0.0	60.0	19,891
Karonga	16.9	64.4	3.3	0.4	85.0	2,803
Kasungu	9.3	44.2	13	0.3	66.8	5,805
Lilongwe	25.1	38.1	7.6	1.0	71.8	5,875
Machinga	18.0	50.0	2.6	0.0	70.6	7,391
Mangochi	10.8	58.7	4.9	0.4	74.8	4,569
Mchinji	11.0	42.3	8.5	0.2	62.0	8,323
Mulanje	28.1	47.6	4.6	0.4	80.7	4,475
Mwanza	5.3	66.0	4.5	0.2	76.0	2,373
Mzimba	24.0	51.4	4.3	0.0	79.7	6,629
Nkhata Bay	16.2	57.5	3.3	0.0	77.0	1,705
Nkhotakota	19.7	53.8	3.5	0.2	77.2	2,412
Nsanje	3.5	74.4	1.9	1.1	80.9	2,419
Ntcheu	15.6	61.7	3.6	0.5	81.4	4,949
Ntchisi	5.6	47.0	6.4	0.2	59.2	2,830
Phalombe	35.7	48.7	0.6	0.1	85.1	2,746
Rumphi	51.0	31.9	1.6	0.0	84.5	1,643
Salima	12.8	62.8	4.5	0.0	80.1	6,457
Thyolo	10.2	54.3	15	0.0	79.5	5,712
Zomba	11.3	63.6	6.2	0.5	81.6	6,332
<b>Malawi</b>	<b>16.6</b>	<b>51.4</b>	<b>6.0</b>	<b>0.2</b>	<b>74.2</b>	<b>131,841</b>

## Annex 5 : Primary school net attendance ratio

Percentage of children of primary school age (6-13) attending primary or secondary school (NAR), Malawi 2006						
Area	Boys		Girls		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children
<b>Region</b>						
Northern	89.3	1,833	91.2	1,862	90.3	3,695
Central	79.6	7,027	84.3	7,380	82.0	14,407
Southern	77.9	7,036	79.8	7,439	78.9	14,479
<b>District</b>						
Balaka	87.3	397	88.2	417	87.7	814
Blantyre	88.1	1,208	88.2	1,181	88.1	2,390
Chikwawa	71.3	631	70.0	673	70.6	1,305
Chiradzulu	86.3	453	88.7	467	87.5	920
Chitipa	92.6	229	93.9	218	93.2	446
Dedza	67.7	319	72.6	317	70.2	636
Dowa	77.7	2,349	86.4	2,493	82.2	4,842
Karonga	82.3	344	84.7	389	83.6	733
Kasungu	86.0	721	88.1	724	87.1	1,445
Lilongwe	81.1	640	84.5	725	82.9	1,365
Machinga	70.2	914	71.4	949	70.8	1,863
Mangochi	70.6	564	73.6	591	72.1	1,155
Mchinji	79.0	969	78.8	983	78.9	1,952
Mulanje	74.7	522	79.0	592	77.0	1,115
Mwanza	77.8	274	87.7	326	83.2	601
Mzimba	90.7	837	93.5	827	92.1	1,664
Nkhata Bay	89.7	221	88.9	213	89.3	435
Nkhotakota	80.1	296	82.6	299	81.4	595
Nsanje	74.6	304	75.9	290	75.3	594
Ntcheu	82.2	598	86.9	616	84.6	1,214
Ntchisi	80.8	314	84.6	384	82.9	698
Phalombe	69.4	333	75.3	379	72.5	712
Rumphi	91.3	202	93.6	215	92.5	418
Salima	81.3	821	83.5	839	82.4	1,660
Thyolo	78.8	682	80.2	748	79.5	1,430
Zomba	78.3	754	80.8	825	79.6	1,579
<b>Malawi</b>	<b>80.0</b>	<b>15,896</b>	<b>83.0</b>	<b>16,680</b>	<b>81.5</b>	<b>32,581</b>

## Annex 6 : Comprehensive knowledge about HIV prevention

Percentage of adults aged 15-49 years who have comprehensive knowledge about HIV prevention, Malawi 2006				
Area	Women		Men	
	Have comprehensive knowledge	Number	Have comprehensive knowledge	Number
<b>Region</b>				
Northern	36.9	2,857	42.6	869
Central	34.2	11,685	29.9	3,512
Southern	47.3	11,716	50.6	3,255
<b>District</b>				
Balaka	51.1	588	81.1	175
Blantyre	58.9	2,278	53.8	688
Chikwawa	34.9	913	54.5	307
Chiradzulu	58.5	804	50.9	200
Chitipa	31.8	322	24.0	85
Dedza	28.7	496	31.0	124
Dowa	36.0	3,988	27.5	1,221
Karonga	50.8	562	26.3	164
Kasungu	44.3	1,113	35.5	385
Lilongwe	42.8	1,211	43.7	381
Machinga	38.4	1,525	16.5	349
Mangochi	46.4	880	26.8	225
Mchinji	33.3	1,581	17.3	501
Mulanje	73.6	913	72.4	249
Mwanza	32.1	482	57.1	136
Mzimba	34.0	1,304	57.3	424
Nkhata Bay	27.3	336	11.7	98
Nkhotakota	28.3	479	39.4	133
Nsanje	46.9	435	41.8	123
Ntcheu	23.7	991	18.6	234
Ntchisi	18.7	544	8.3	178
Phalombe	24.8	528	35.1	143
Rumphi	39.4	334	54.0	98
Salima	31.6	1,283	49.3	357
Thyolo	34.5	1,135	43.5	275
Zomba	45.9	1,236	70.1	384
<b>Malawi</b>	<b>40.3</b>	<b>26,259</b>	<b>40.2</b>	<b>7,636</b>

## Annex 7 : MDG Indicators : Malawi

Data for 20 of 48 MDG indicators have been collected in MICS. The following tables provide information on 16 key MDG indicators to help monitoring the progress made by Malawi in the achievement of seven MDGs.

Data on the remaining 4 MDG indicators namely (i) Proportion of pupils starting grade 1 who reach grade 5 (ii) Literacy rate of 15-24 year-olds (iii) Ratio of literary women to men, 15-24 years old and (iv) Maternal mortality ratio will be published in the MICS Main Report.

Except for Maternal Mortality Ratio, data for all the MDG indicators will be available by district.

### MDG 1 : Eradication of extreme poverty and hunger

Source	Stunting		Wasting		Underweight*	
	- 3 SD	-2 SD	- 3 SD	-2 SD	- 3 SD	-2 SD
MICS 2006	20.5	45.9	0.5	3.3	3.4	19.4
MDHS 2004	22.2	47.8	1.6	5.2	4.5	22.0

\* : MDG Indicator 4

### MDG 2 : Achieve universal primary education

Source	Primary school net attendance ratio		
	Total	Boys	Girls
MICS 2006	81.5	80.0	83.0
MDHS 2004	82.0	80.1	83.9

MDG Indicator 6

### MDG 3 : Promote gender equality and empower women

Source	Ratio of girls to boys in primary school		
	Total	Urban	Rural
MICS 2006	1.04	0.99	1.05
MDHS 2004	0.94	0.93	0.95

MDG Indicator 9

### MDG 4 : Reduce child mortality

Source	Neonatal Mortality (NN)	Post neonatal Mortality (PNN)	Infant Mortality ** (IMR)	Child Mortality (1-4)	Under Five Mortality * (U5MR)
MICS 2006	31	38	69	53	118
MDHS 2004	27	49	76	62	133

\* : MDG Indicators 13      \*\* : MDG Indicators 14

Source	Childhood vaccinations								
	BCG	DPT1	DPT 2	DPT 3	Polio1	Polio2	Polio3	Measles*	All
MICS 2006	95.5	96.2	93.1	86.2	95.7	90.9	81.3	85.2	71.4
MDHS 2004	91.4	95.0	90.6	81.5	94.9	89.7	77.7	78.7	64.4

\* : MDG Indicator 15

### MDG 5: Improve maternal health

Source	Proportion of births attended by skilled health personnel		
	Total	Urban	Rural
MICS 2006	53.6	81.6	50.4
MDHS 2004	57.1	83.8	52.0

MDG Indicator 17

### MDG 6 : Combat HIV/AIDS, malaria and other diseases

Source	Condom use rate of the contraceptive prevalence rate		
	Total	Urban	Rural
MICS 2006	1.6	1.3	1.6
MDHS 2004	1.8	1.1	1.9

MDG Indicator 19

Source	Condom use at last high-risk sex (among 15-24)					
	Women			Men		
	Total	Urban	Rural	Total	Urban	Rural
MICS 2006	39.6	51.9	35.8	59.6	69.1	57.8
MDHS 2004	35.2	48.6	29.2	46.8	58.2	43.3

MDG Indicator 19.a

Source	Percentage of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS			
	Women		Men	
	Total	Urban	Total	Urban
MICS 2006	41.6		40.7	
MDHS 2004	23.6		36.3	

MDG Indicator 19.b

Source	Contraceptive prevalence rate		
	Total	Urban	Rural
MICS 2006	41.7	45.4	41.2
MDHS 2004	32.5	37.2	31.6

MDG Indicator 19.c



Source	Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years		
	Total	Boys	Girls
MICS 2006	0.97	0.96	0.99
MDHS 2004	1.00	1.00	1.00

MDG Indicator 20

Source	Proportion of population in malaria-risk areas using effective malaria prevention measures							
	At least one Bednet	At least one ITN	Slept under a bednet			Slept under an ITN*		
			T	U	R	T	U	R
MICS 2006	49.5	35.0	29.0	52.1	26.1	23.0	42.9	20.6
MDHS 2004	41.9	27.4	20.2	19.4	21.0	14.8	35.2	15.0

\* : MDG Indicator 22

### MDG 7 : Ensure environmental sustainability

Source	Proportion population using solid fuels		
	Total	Urban	Rural
MICS 2006	98.8	91.9	99.7
MDHS 2004	97.9	88.7	99.7

MDG Indicator 29

Source	Proportion of population with sustainable access to an improved water source		
	Total	Urban	Rural
MICS 2006	74.2	96.2	71.3
MDHS 2004	62.4	91.4	56.9

MDG Indicator 30

Source	Proportion of population with access to improved sanitation		
	Total	Urban	Rural
MICS 2006	88.2	97.3	86.9
MDHS 2004	85.4	94.8	83.7

MDG Indicator 31

## Annex 8 : Indicators Definitions

#	Indicator	Numerator	Denominator
1.	<i>Neonatal mortality rate</i>	Probability of dying within the first month of life	
2.	<i>Postneonatal mortality rate</i>	Difference between infant and neonatal mortality	
3.	<i>Infant mortality rate</i>	Probability of dying by exact age 1 year	
4.	<i>Child mortality</i>	Probability of dying between the first and the fifth birthday	
5.	<i>Under-five mortality rate</i>	Probability of dying by exact age 5 years	
6.	<i>Stunting prevalence</i>	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
7.	<i>Wasting prevalence</i>	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
8.	<i>Underweight prevalence</i>	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
9.	<i>Exclusive breastfeeding rate</i>	Number of infants aged 0-3 months, and 0-5 months that are exclusively breastfed	Total number of infants aged 0-3 months, and 0-5 months surveyed
10.	<i>Timely complementary feeding rate</i>	Number of infants aged 6-9 months that are receiving breastmilk and complementary foods	Total number of infants aged 6-9 months surveyed
11.	<i>Continued breastfeeding rate</i>	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
12.	<i>Tuberculosis immunization coverage</i>	Number of children aged 12-23 months receiving BCG vaccine before their first birthday	Total number of children aged 12-23 months surveyed
13.	<i>Immunization coverage for diphtheria, pertussis and tetanus (DPT)</i>	Number of children aged 12-23 months receiving DPT3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed

#	Indicator	Numerator	Denominator
14.	<i>Polio immunization coverage</i>	Number of children aged 12-23 months receiving OPV3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
15.	<i>Measles immunization coverage</i>	Number of children aged 12-23 months receiving measles vaccine before their first birthday	Total number of children aged 12-23 months surveyed
16.	<i>Fully immunized children</i>	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
17.	<i>Antibiotic treatment of suspected pneumonia</i>	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
18.	<i>Solid fuels</i>	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
19.	<i>Under-fives sleeping under mosquito nets</i>	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
20.	<i>Under-fives sleeping under insecticide- treated nets</i>	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
21.	<i>Use of improved drinking water sources</i>	Number of household members living in households using improved sources of drinking water	Total number of household members in households surveyed
22.	<i>Use of improved sanitation facilities</i>	Number of household members using improved sanitation facilities	Total number of household members in households surveyed
23.	<i>Contraceptive prevalence</i>	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
24.	<i>Antenatal care</i>	Number of women aged 15-49 years that were attended at least once during pregnancy in the last 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
25.	<i>Skilled attendant at delivery</i>	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

#	Indicator	Numerator	Denominator
26.	<i>Institutional deliveries</i>	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
27.	<i>Net primary school attendance rate</i>	Number of children of primary-school age currently attending primary or secondary school	Total number of children of primary-school age surveyed
28.	<i>Gender parity index</i>	Proportion of girls in primary education	Proportion of boys in primary education
29.	<i>Child labour</i>	Number of children aged 5-14 years that are involved in child labour	Total number of children aged 5-14 years surveyed
30.	<i>Marriage before age 15 and age 18</i>	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
31.	<i>Young women aged 15-19 years currently married or in union</i>	Number of women aged 15-19 years currently married or in union	Total number of women aged 15-19 years surveyed
32.	<i>Comprehensive knowledge about HIV prevention among adults aged 15-49</i>	Number of women and men aged 15-49 years that correctly identify two ways of avoiding HIV infection and reject three common misconceptions about HIV transmission	Total number of women and men aged 15-49 years surveyed
33.	<i>Condom use at last high-risk sex</i>	Number of women and men 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 and men aged 15-24 years surveyed that had a non-marital, non-cohabiting partner in the previous 12 months
34.	<i>Children not living with a biological parent</i>	Number of children aged 0-17 years not living with a biological parent	Total number of children aged 0-17 years surveyed
35.	<i>Prevalence of orphans</i>	Number of children under age 18 with at least one dead parent	Total number of children under age 18 surveyed
36.	<i>School attendance of orphans versus non-orphans</i>	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