# Chapter 1

#### INTRODUCTION

## 1.0: Background

The Second Malawi Integrated Household Survey is a nationally representative sample survey designed to provide information on the various aspects of household welfare in Malawi. The survey was conducted by the National Statistical Office from March 2004-April 2005. The survey collected information from a nationally representative sample of 11,280 households. The sampling design is representative at both national and district level hence the survey provides reliable estimates for those areas.

This is the third survey conducted under the Integrated Household Surveys Programme. The other surveys conducted under this Programme were; the Household Expenditure and Small Scale Economic Activities (HESSEA) conducted in 1990 and the first Integrated Household Survey (IHS1) conducted in 1997/98. The National Statistical Office also conducted the Core Welfare Indicators Questionnaire (CWIQ) in 2002 and the Welfare Monitoring Survey (WMS 2005). The WMS has been designed to provide quick results of welfare levels of the country and is less comprehensive relative to the IHS.

# 1.1: Objective of the survey

The survey is designed to cover a wide array of subject matter, whose primary objective of is to provide a complete and integrated data set to better understand the target population of households affected by poverty. Some specific objectives of the survey are as follows;

- Provide timely and reliable information on key welfare and socio-economic indicators and meet special data needs for the review of the Malawi Poverty Reduction Strategy, which have been implemented in Malawi for the last five years since year 2002.
- Provide data to come up with an update of the poverty profile for Malawi (poverty incidence, poverty gap, severity of poverty)
- Derive indicators for monitoring of Malawi's progress towards achievement of the Millennium Development Goals (MDGS) and the MPRS targets.
- Provide an understanding of the people of Malawi's living conditions.

- Derive an independent estimate of total household expenditure.
- Provide information on household consumption on selected items with the aim of revising the weights in the Malawi Consumer Price Index (CPI).

### 1.2: Sample design and coverage

The IHS2 had a total sample size of 11,280 households. The sample for IHS-2 was drawn using a two-stage stratified sampling procedure from a sample frame using the 1998 Population and Housing Census enumeration areas (EAs). Each of the twenty-seven districts was considered as a separate sub-stratum of the main rural stratum (except for Likoma district). The urban stratum includes the four major urban areas: Lilongwe, Blantyre, Mzuzu, and the Municipality of Zomba.

The IHS-2 used a two-stage stratified sample selection process. The primary sampling units (PSU) were the Enumeration areas. These were selected for each strata on the basis of probability proportional to size (PPS). The second stage involved randomly selecting 20 households in each EA. Every listed household in an EA had an equal chance of being selected to be enumerated.

The listing of all households in the enumeration area was conducted by NSO staff in three phases in January, May and October 2004.

**Table 1.1: Sample Selection** 

Table 1.1: Sample Selection								
District Code	District	Population Projection 2004	EAs	IHS-2 Sample HHs				
101	Chitipa	31,006	12	240				
102	Karonga	47,147	12	240				
103	Nkhata Bay	38,062	12	240				
104	Rumphi	28,849	12	240				
105	Mzimba	108,046	24	480				
105	Mzuzu City	27,144	12	240				
201	Kasungu	118,607	24	480				
202	Nkhotakota	60,007	12	240				
203	Ntchisi	44,537	12	240				
204	Dowa	103,239	24	480				
205	Salima	72,787	12	240				
206	Lilongwe	251,640	48	960				
206	Lilongwe City	141,389	24	480				
207	Mchinji	86,092	12	240				
208	Dedza	135,849	24	480				
209	Ntcheu	101,707	24	480				
301	Mangochi	176,345	36	720				
302	Machinga	101,839	24	480				
303	Zomba	139,810	24	480				
303	Zomba Urban	21,719	12	240				
304	Chiradzulu	67,912	12	240				
305	Blantyre	85,110	12	240				
305	Blantyre City	163,393	24	480				
306	Mwanza	37,941	12	240				
307	Thyolo	131,835	24	480				
308	Mulanje	122,974	24	480				
309	Phalombe	71,573	12	240				
310	Chikwawa	94,237	24	480				
311	Nsanje	49,817	12	240				
12	Balaka	70,732	12	240				
	TOTAL	2,731,346	564	11,280				

#### 1.3 Questionnaires

The IHS-2 household questionnaire maintained comparisons with the earlier IHS-1 household questionnaire wherever possible. However, the IHS-2 questionnaire is more detailed and new modules were added. The questionnaire covered the socio economic characteristics of the household in the following modular aspects;

- Demographic,
- Education,
- Health
- Agriculture
- Labour-force
- Anthropometric information

There were five modules included in the 2004 questionnaire that did not appear in the 1997-98 questionnaire. These included;

- Security and Safety,
- Social Safety Nets,
- Credit,
- Subjective Assessment of Well-being, and
- Recent Shocks to the Household.

In addition there were seven agricultural modules that collected more detailed information on the agricultural situation in households than was collected in IHS-1. (See Appendix 2)

The IHS-2 Community Questionnaire was designed to collect information that is common to all households in a given area. During the survey a "community" was defined as the village or urban location surrounding the selected enumeration area, which most residents recognise as being their community. The questionnaire was administered to a group of several knowledgeable residents such as the village headman, headmaster of the local school, agricultural field assistant, religious leaders, local merchants, health workers and long-term knowledgeable residents. Information collected included basic physical and demographic characteristics of the community; access to basic services; economic activities; agriculture; how conditions have changed over the last five years; and prices for 47 common food items, non-food items, and ganyu labor.

## 1.4. Organization of the survey

## 1.4.1 Training

Training of enumerators was conducted for four weeks from 2nd February 2004 – 3rd March 2004, at the Chilema Ecumenical Lay Training Center in Zomba. A total number of 80 trainees with Malawi School Certificate of Education were recruited and trained. Of the trainees, the best 15 were promoted to become Field Supervisors, 47 were retained as enumerators, 12 as data entry clerks and 10 were set aside as reserve staff. In addition 12 NSO permanent staff were trained as Zone Supervisors.

### 1.4.2 Fieldwork

Fieldwork commenced on March 8, 2004, started at the same time through out the country and was completed by April 6th 2005. The survey was designed such that households were visited once. The households were spread over a year, to cater for seasonality. Field work was organised and implemented from 8 Zonal centers, namely; Karonga, Mzuzu, Kasungu, Salima, Lilongwe, Liwonde, Blantyre, and Ngabu. The zones were located in the Agricultural Development Division (ADD) headquarters.

Each zone consisted of one zone supervisor, field supervisors, and enumerators and it was equipped with a 4 X 4 vehicle and a driver to facilitate their movement within their areas.

In order to ensure good quality, during the course of the field work, the IHS-2 management core team led by the National task manager, the field coordinators and the technical mission from the World Bank visited all zones every month, supervised and coordinated fieldwork activities. (See Annex 1 for survey team).

# 1.5 Data processing

### (a) Data Entry

Data capturing for the IHS-2 started as soon as the first months of fieldwork was completed in April 2005. Data entry was done concurrently with data collection. The IHS-2 data entry centre was centralised at the National Statistical Office headquarters and was organized as follows;

Once the questionnaires arrived the data editor checked the questionnaires and assigned questionnaire numbers. The CSPRO software was used to capturer the data. This software provides automatic data checks for acceptable values for the variables, and checks between different modules of the questionnaire.

#### (b) Data Cleaning

The data cleaning process was done in several stages. The first stage was to make sure that the data as captured reflected the information that the informants provided. The data processing manager did the error checks for each enumeration area. These were cross-examined physically with the questionnaires, and the errors were documented.

### 1.6 Sample results

The table below shows the response rates for the survey. A total of 11,280 were selected for the sample of which 10,777 households were occupied and successfully interviewed, yielding a response rate of 96 percent. Of the selected households 507 replacements were made. The primary reason for replacement was that the dwelling could be found but no household member could be found after repeated attempts or the dwelling was unoccupied. There were only 41 refusals from respondents.

Table 1. 2: Sample response rate

Reasons for Replacement	Number of replacements		
Dwelling found but no HH member could be			
found	197		
Dwelling found but respondent refused	41		
Dwelling found but appears unoccupied	180		
Dwelling found but not a residential building	12		
Dwelling destroyed	43		
Dwelling not found	30		
TOTAL	507		

It is also important to note here that there have been some key changes in data collection from the first IHS to the current IHS. The key changes are mainly in terms of recall period for food consumption whereby IHS1 used a diary while IHS2 has used a 7-day recall period. Because of such changes, direct comparison on consumer expenditure between IHS1 and IHS2 is not encouraged. Likewise, poverty estimates developed from the two surveys should not be directly comparable.

## 1.7 Organization of this report

Chapter two describes and analyses the characteristics of the Malawi population. The characteristics of the population in terms of household size, migration and orphanhood are described, paying specific attention to the population's age and gender structure. The population is also distributed to both the geographical and socio-economic status of the household

Chapter three considers the educational characteristics of the Malawi population. The supply of education encompasses physical infrastructure and type of schools; demand is

related to various aspects of enrolment; and the quality of education refers to how the system works internally. Special emphasis is given to enrolment levels and characteristics, as well as to the literacy levels in the population.

Chapter four discusses on the general health situation of the Malawi population and their access to health services. Findings on the prevalence of chronic illness, incidence of acute illness and injury are examined in relation to the use of health services.

This chapter looks further at the incidence of illnesses, describing the occurrence of diarrhea and acute respiratory infection and the means by which they are treated, coverage of reproductive health and delivery services and care, such as place and attendance of health professionals at birth. The analysis also focuses on the different measurements of malnutrition and their distribution within children under five and deaths in the household.

Chapter five deals with labour force participation and employment. The analysis measures the labour force participation rates, unemployment, and employment. It also outlines some of the difficulties inherent in estimating employment and unemployment in an economy like Malawi's. The distribution of occupation and industries in Malawi is also discussed.

Chapter six describes the expenditure, income and wealth of households. Data was collected on household expenditure on all items from which a household can derive utility, such as food, non-food costs, and expenditure on education, housing, transport, health etc. The total household expenditure is computed for all expenditure items. These are grouped according to Classification of individual consumption by product (COICOP). The per capita expenditure quintiles are also used as a proxy for the socio economic status of the household. In addition, the chapter estimates the household income, from all sources, e.g. farms products, non-farm income, employment, remittances etc. The asset possession of households is also outlined. All these are used to portray income patterns of the household that in turn lead to an analysis of inequality, using Gini Coefficients. The actual measurement of poverty is dealt with in another publication, the Malawi Poverty and Vulnerability Assessment Paper.

Chapter seven examines housing conditions, the availability of infrastructure and services, and environmental issues. This chapter first looks at the delivery of basic services such as electricity, water and sanitation. The households' dwellings are then described with reference to the type, size, number of rooms in dwelling, and tenure arrangements, in order to provide information pertaining to the space in which individuals live.

Chapter eight examines the agricultural production characteristics of the households; food security, sales of agricultural produce, own account consumption, tobacco production, dry season cropping use of irrigation methods.

Chapter nine examines the access to loans and credit by households, the reasons for obtaining loans, sources of loan and reasons why many households do not obtain loans.

Chapter ten examines the safety and security aspect of households; the proportion of the population that experienced an incidence of crime, the perception of safety in the community, satisfaction with quality of police service.

Chapter eleven describes welfare aspects of the household, specifically the evaluation on the household welfare and wealth of households. Data included perceptions of median income, the material possessions of households and subjective assessment of destitution and poverty are used to portray income patterns. The data obtained are subjective, and insight into the characteristics of poverty in Malawi is gained through an understanding of how people perceive their situation. The chapter further looks at recent shocks affecting households and how households mitigate against the shocks and the safety nets programs from which households have benefited.

For concepts and definitions about various aspects and variables used please refer to the specific chapters.

SUMMARY OF KEY INDICATORS

**Table 1.3: SUMMARY OF KEY INDICATORS** 

			1998			2005	
	Unit of		Poorest	Richest		Poorest	Richest
Indicators  Demographic Indicators	Measure	All	20 %	20 %	All	20 %	20 %
Demographic Indicators							
Sample size (households	Number	6,586	1,014	1,710	11,280	2,281	2,219
Total Population estimate	000's	9,795	1,936	1,886	12,170	3,215	1,721
Average household size	Number	4.4	5.3	3.6	4.5	5.9	3.2
Head of Household Characteristics							
Education level of head							
No education	Percent	26	40	6	28	39	15
Primary	Percent	60	57	41	56	56	47
Secondary and above	Percent	14	3	53	18	5	39
Sex of household head							
Male	Percent	78	73	87	77	74	81
Female	Percent	22	27	13	23	26	19
Employment Ratios (among Labour force)							
Employment ratio	Percent	97	97	97	92	95	89
MDG1: Eradicate Extreme Poverty and Hunger							
Mean annual per capita expenditure	Malawi kwacha	18,872	10,436	44,686	26,058	7,594	54,793
Mean annual share of expenditure on food	Percent	70.9	77.9	55.3	55.6	61.1	48
Mean annual share of expenditure on health	Percent	0.7	0.5	1.0	1.4	1.6	1.2
Mean annual share of expenditure on education	Percent	0.5	0.2	1.2	1.73	1	2.7
MDG2: Education and literacy MDG 4: Promote 0	Gender Equa	lity					
Net Primary Enrollment							
Total	Percent	57	56	68	80	72	86
Male	Percent	56	53	72	79	71	85
Female	Percent	59	59	65	81	72	87
Adult literacy rate							
Total	Percent	51	51	72	64	52	82
Male	Percent	62	47	78	76	68	88
Female	Percent	58	27	65	52	40	74
Youth Literacy rate (15-24)							
Total	Percent	63	51	78	76	52	81
Male	Percent	69	57	80	81	75	90
Female	Percent	58	44	75	72	62	85

MDG4: Reduce Child Mortality MDG5: Improve Maternal health							
Incidence of Illness	Percent	28	24	27	26	22	26
Birth assisted by skilled personnel Proportion households with under five	Percent	-	-	-	58	54	70
children sleeping under net	Percent	-	-	-	63	61	62
Stunting (6-59 months)	Percent	56	59	53	43	44	41
Wasting (6-59 months)	Percent	11	12	11	5	6	4
Underweight (6-59 months)	Percent	25	32	23	22	22	22
MDG7: Ensure Environmental Sustainability							
Owner occupancy rate	Percent	87	98	66	81	89	60
Proportion with electricity within 100 m Proportion with access to improved source of water	Percent				16	8	29
Piped (own)	Percent	7	0.2	19.7	2.2	0.2	9.2
Piped borne	Percent	21	20.8	26	17.7	10.6	29
Borehole/Protected Well	Percent	23	26.7	17.1	46.5	52.4	36.3
Total	Percent	50	47	62.8	66.4	63.2	74.5
Proportion with access to improved sanitation							
Flush Toilet	Percent	-	=	-	2.8	0.5	9.9
VIP latrine	Percent	-	-	-	1.8	1	3.8
Traditional Latrine with roof	Percent	-	-	-	57.4	51.7	61.3
Total	Percent	-	-	=	61.9	53.1	75
Traditional Fuel Use							
Firewood	Percent	92	99	77	90	98	72
Charcoal	Percent	2	0	7	7	1	18
Total	Percent	94	99	83	98	100	92
Nontraditional fuel use							
Paraffin	Percent	0.9	0	3	0.2	0	0.7
Electricity	Percent	3.1	0.1	12.2	1.7	0.1	7.4
Gas	Percent	0	0	0.2	0.1	0	0.5
Other	Percent	1.6	1.1	1.2	0.3	0	8.0
Total	Percent	5.7	1.2	16.6	1.9	0.1	8.1
Safety and security							
Proportion unsafe in own house	Percent				15.5	12.7	18.6
Proportion of persons ever attacked	Percent				3.9	2.4	5.4
Source: Malawi Integrated Household Survey 19	998, 2004						