



**UGANDA BUREAU OF STATISTICS**



# **UGANDA NATIONAL HOUSEHOLD SURVEY**

**2002/2003**

REPORT ON THE

## **SOCIO-ECONOMIC SURVEY**

Uganda Bureau of Statistics  
P.O. Box 13, Entebbe  
Tel: 041 320741, 322099/100/101  
075 - 720745, 077 - 705127  
Fax: 041 320147  
E-mail: [ubos@infocom.co.ug](mailto:ubos@infocom.co.ug)  
Website: [www.ubos.org](http://www.ubos.org)

**November 2003**

## **PREFACE**

---

The Uganda National Household Survey 2002/03 was the eighth in a series of household surveys that started in 1988. Like the previous household surveys, the UNHS 2002/03 collected information on the socio-economic characteristics at both the household and community levels. The main objective of the survey was to collect high quality data on population and socio-economic characteristics of households for monitoring development performance. The UNHS 2002/03 comprised of four modules namely the Socio-economic, Labour Force, Informal Sector and Community modules.

This report presents the major findings based on the socio-economic module of the UNHS 2002/03. It shows the levels of different indicators and their respective trends over time. Indicators on population characteristics, education, health, household expenditure and poverty among others have been presented at national, regional and rural-urban levels.

Whereas this report presents the key findings of UNHS 2002/03, a lot more can still be studied from the data. The Uganda Bureau of Statistics would like to encourage stakeholders to utilize the rich dataset that exists at the UBOS to do analyses so as to better inform future policy debate. It is my hope that the findings will contribute to the knowledge base and assist stakeholders in planning and policy formulation.

I am most grateful to the Government of Uganda and the World Bank for the financial assistance that enabled the survey to take place. I would also like to acknowledge the Economic Policy Research Centre (EPRC) and Dr. Simon Appleton of Nottingham University for their technical contribution during the data processing and analysis phase of the survey. I would also like to express my gratitude to all the field staff who worked tirelessly to successfully implement the survey. Finally, I would also wish to thank the survey respondents who generously provided the information on which this report is based.

J.B. Male-Mukasa  
**Executive Director**

**November 2003**

**ACRONYMS**

---

CER	Crude Enrollment Ratio
CPI	Consumer Price Index
CV	Coefficient of Variation
EA	Enumeration Area
EPRC	Economic Policy Research Centre
FAL	Functional Adult Literacy
FMS	First Monitoring Survey
GDP	Gross Domestic Product
HBS	Household Budget survey
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSSP	Health Sector Strategic Plan
IHS	Integrated Household Survey
LC	Local Council
NEMA	National Environment Management Authority
NER	Net Enrollment Ratio
NGO	Non-Governmental Organisation
NHP	National Health Policy
NWSC	National Water and Sewerage Corporation
OPD	Outpatient-Department
PEAP	Poverty Eradication Action Plan
PPA	Participatory Poverty Assessment
UBOS	Uganda Bureau of Statistics
UNHS	Uganda National Household Survey
UPE	Universal Primary Education
UPPAP	Uganda Participatory Poverty Assessment Project

---

---

## TABLE OF CONTENTS

---

Preface.....	Page i
Acronyms .....	Page ii
Table of Contents .....	Page iii
List of Tables .....	Page vi
Executive Summary .....	Page ix
<b>Chapter One – Introduction</b>	
1.1 Background .....	Page 1
1.2 Survey Objectives .....	Page 1
1.3 Scope and Coverage .....	Page 2
<b>Chapter Two – Characteristics of Household Members</b>	
2.1 Population .....	Page 6
2.1.1 Introduction.....	Page 6
2.1.2 Population by Age and Sex .....	Page 6
2.2 Households.....	Page 7
2.2.1 Number of Households.....	Page 7
2.2.2 Average Household Size.....	Page 8
2.2.3 Household Headship .....	Page 8
2.3 Household Composition .....	Page 9
2.4 Orphanhood.....	Page 9
2.5 Summary of Findings .....	Page 10
<b>Chapter Three – Education</b>	
3.0 Introduction .....	Page 11
3.1 Education Attainment of the Population .....	Page 11
3.2 Literacy Status of Household Members .....	Page 13
3.3 Total Primary School Enrolment.....	Page 14
3.4 Enrolment in Primary Schools .....	Page 15
3.5 Net Primary School Enrolment Ratio .....	Page 15
3.6 Reasons for Never Attending school .....	Page 17
3.7 Reasons for Dropping Out of School .....	Page 18
3.8 Proportion of Children Attending at the Right Age .....	Page 18
3.9 Average Age of Pupils Attending Each Class of Primary School ..	Page 19
3.10 Schooling Characteristics of Children Aged 3 – 5 Years .....	Page 19
3.11 Schooling Characteristics of Students Aged 13–18 years .....	Page 20
3.12 Distribution of Primary Schools by Management.....	Page 20
3.13 Distribution of School Type .....	Page 21
3.14 Provision of Meals at School .....	Page 21
3.15 Summary of Findings .....	Page 22
<b>Chapter Four – Health</b>	
4.0 Introduction .....	Page 23
4.1 Incidence of Sickness.....	Page 23
4.2 Major Causes of Morbidity.....	Page 24
4.3 Medical attention Sought.....	Page 25
4.4 Average Distance to Health Facility .....	Page 25
4.5 Diarrhoea Prevalence .....	Page 26

4.6	Mosquito Net Utilization.....	Page 27
4.7	HIV/AIDS .....	Page 27
4.8	Summary of Findings .....	Page 30
<b>Chapter Five – Housing and Household Characteristics</b>		
5.0	Introduction.....	Page 31
5.1	Housing Conditions .....	Page 31
5.1.1	Type of Housing Unit.....	Page 31
5.1.2	Occupancy Tenure of Dwelling Unit.....	Page 32
5.1.3	Number of Rooms Used for Sleeping .....	Page 32
5.1.4	Land Tenure of Plots.....	Page 32
5.2	Household Conditions .....	Page 33
5.2.1	Type of Roof, Wall and Floor .....	Page 33
5.2.2	Fuel for Cooking.....	Page 34
5.2.3	Fuel for Lighting .....	Page 34
5.3	Quality and Availability of Safe Drinking Water .....	Page 35
5.4	Type of Toilet Facilities.....	Page 36
5.5	Solid Waste Disposal .....	Page 36
5.6	Types of Bathrooms Used.....	Page 36
5.7	Types of Kitchens Used .....	Page 37
5.8	Ownership of Mode of Communication .....	Page 37
5.9	Main Source of Information .....	Page 38
5.10	Summary of Findings .....	Page 38
<b>Chapter Six – Household Expenditure and Poverty Estimates</b>		
6.0	Introduction.....	Page 39
6.1	Methodology .....	Page 39
6.1.1	Data Transformation .....	Page 39
6.2	Consumption Expenditure .....	Page 40
6.2.1	Consumption Expenditure Per Household .....	Page 40
6.2.2	Consumption Expenditure Per Capita.....	Page 41
6.2.3	Share of Household Expenditure by Item Group.....	Page 44
6.3	Poverty Trend Estimates .....	Page 46
6.4	Summary of Findings .....	Page 54
<b>Chapter Seven – Welfare Indicators</b>		
7.0	Introduction.....	Page 55
7.1	Ownership of Clothes.....	Page 55
7.2	Ownership of Blankets .....	Page 55
7.3	Ownership of Means of Transport .....	Page 56
7.4	Access to Information.....	Page 57
7.5	Salt Usage .....	Page 58
7.6	Levels of Nutrition .....	Page 58
7.7	Breakfast for Children aged 0 – 4 Years .....	Page 59
7.8	Safety from Crime and Violence .....	Page 60
7.9	Delivery of Justice.....	Page 60
7.10	Summary of Findings .....	Page 61

**Chapter Eight – Informal Sector**

8.0	Introduction .....	Page 62
8.1	Households Operating Enterprises .....	Page 62
8.2	Household Enterprises by Region .....	Page 63
8.3	Number of Household Enterprises by Industry .....	Page 64
8.4	Number of Persons Engaged .....	Page 64
8.5	Total Persons Engaged by Activity Status .....	Page 65
8.6	Total Persons Engaged by Sex .....	Page 66
8.7	Paid Employees .....	Page 66
8.8	Ownership of Enterprise .....	Page 67
8.9	Acquisition of Enterprises .....	Page 67
8.10	Duration of Business .....	Page 68
8.11	Duration in Months When Business was Operational .....	Page 69
8.12	Main Source of Finance .....	Page 69
8.13	Collateral Required for the Loan .....	Page 70
8.14	Market for the Products .....	Page 70
8.15	Problems Encountered in Establishing the Business .....	Page 71
8.16	Turnover in Relation to a Year Ago .....	Page 72
8.17	Performance of Activity Compared to a Year Ago .....	Page 73
8.18	Gross Output and Value Added .....	Page 73
8.18.1	Gross Output .....	Page 73
8.18.2	Value Added .....	Page 74
8.19	Gross Output and Value Added by Background Characteristics ...	Page 74
8.20	Gross Output by Industry and Region .....	Page 75
8.21	Summary of Findings .....	Page 76

Appendix I – References

Appendix II (A) – Methodology of Measuring Poverty

Appendix II (B) – Data Issues

Appendix III – Sampling Design for the UNHS 2002/2003

Appendix IV – Sampling Errors

Appendix V – Socioeconomic Questionnaire

**LIST OF TABLES**

Table 2.1.1	Population by Sex .....	6
Table 2.1.2	Population by Age, Sex and Residence, 2002/03 (%age) .....	7
Table 2.1.3	Population by Residence Status (%age) .....	7
Table 2.2.1	Households by Location .....	7
Table 2.2.2	Average Household Size by Residence and Region .....	8
Table 2.2.3	Household Heads by Age Group and Sex (%age) .....	8
Table 2.2.4	Household Headship by Residence, Sex and Region (%age) .....	9
Table 2.3.1	Distribution of Household Composition by Residences.....	9
Table 2.4.1	Children by survival status of their parents (%age) .....	10
Table 3.1.1	Educational attainment of the Population aged 15 years and above (%age).....	12
Table 3.1.2	Education attainment of the population by Wealth Quintile.....	12
Table 3.2.1	Literacy rates for the Population Aged 10 years and above (%age) .....	13
Table 3.2.2	Literacy rates for the population aged 18 years and above (%age) .....	14
Table 3.3.1	Changes in Total Primary Enrollment (000's of pupils) .....	14
Table 3.5.1	Net Primary School Enrollment Ratio .....	16
Table 3.5.2	Schooling Status for Children Aged 6-12 years (%age) .....	16
Table 3.6.1	Reasons for never attending School by Sex for Children aged 6-12 years (%aged).....	17
Table 3.7.1	Percentage Dropping Out of School by Reason.....	18
Table 3.8.1	Percentage of Children Attending at the Right Age .....	18
Table 3.9.1	Mean age for Children attending Primary School.....	19
Table 3.10.1	Schooling Status of Children 3-5 years.....	19
Table 3.11.1	Schooling Status of Children 13-18 years .....	20
Table 3.12.1	School type for children attending primary School (%age) .....	21
Table 3.13.1	School type for Children Attending Primary School (%age).....	21
Table 3.14.1	Distribution of Schools with Provision of meals in school (%age).....	22
Table 4.1.1	Population Reported illness/Injured during the last 30 days (%age) .....	24
Table 4.2.1	Population by type of Illness/Injury Suffered (%age).....	24
Table 4.3.1	Type of Medical Attention Sought (%age) .....	25
Table 4.4.1	Distance to a Health Facility (km) .....	26
Table 4.5.1	Diarrhoeal Prevalence 2002/03 (%age) .....	26
Table 4.6.1	Use of Mosquito Nets 2002/03 (%age) .....	27
Table 4.7.1	Awareness about HIV/AIDS (10yrs+) 2002/03 - %age.....	28
Table 4.7.2	Knowledge of Specific ways to avoid HIV/AIDS (%age) .....	29
Table 4.7.3	Main channels of Information on HIV/AIDS (%age) .....	30
Table 5.1.1	Dwelling type by Region (%age) .....	32
Table 5.1.2	Occupancy Tenure of Dwelling Unit (%age) .....	32
Table 5.1.3	Number of Rooms Used for Sleeping by Residence (%age).....	32
Table 5.1.4	Type of Land Tenure of Plot (%age).....	33
Table 5.2.1	Households by Type of Roof, Wall and Floor (%age) .....	34
Table 5.2.2	Households by fuel used for cooking (%age) .....	34
Table 5.2.3	Households' Source of fuel for lighting by Residence (%age) .....	35
Table 5.2.4	Households' Source of fuel for lighting by Region (%age) .....	35
Table 5.3.1	Households' having access to safe drinking water by Residence (%age).....	35
Table 5.4.1	Percentage of Households with toilet facilities by residence.....	36
Table 5.5.1	Methods of Solid Waste Disposal by Residence (%age) .....	36
Table 5.6.1	Households owning Bathrooms by Region (%age) .....	37
Table 5.7.1	Households with Kitchens by Region and Residence (%age) .....	37

*Uganda National Household Survey 2002/3*

---

Table 5.8.1	Ownership of communication equipment by Region (%age) .....	38
Table 5.9.1	Main Source of Information by Residence (%age) .....	38
Table 6.2.1	Monthly Consumption Expenditure per Household .....	41
Table 6.2.2	Monthly Nominal Mean Consumption Expenditure per capita .....	42
Table 6.2.3	Monthly Real Mean per Capita Expenditure .....	42
Table 6.2.4	Adjusted Comparison of Monthly Mean Consumption per Capita .....	43
Table 6.2.5	National Accounts Estimates of Real Private Consumption per Capita.....	44
Table 6.2.6	Share of Monthly Household expenditure by Item Groups (%age).....	45
Table 6.2.7	Regional Monthly Expenditure, Urban and Rural by Item Groups (%age) .....	45
Table 6.3.1	Poverty Statistics for 2002/03.....	47
Table 6.3.2(a)	Poverty in the 2003/03.....	48
Table 6.3.2(b)	Poverty in the 1999/00.....	48
Table 6.3.2(c)	Poverty rates in MS-4, 1997 .....	49
Table 6.3.2(d)	Poverty in the IHS, 1992 .....	49
Table 6.3.3	T-test Statistics for Hypothesis of Equality of Poverty Statistics in 1990/00 and 2002/03 .....	49
Table 6.3.4	Consumption Per Adult Equivalent at Each Decile (1997 Shillings Per Month) .....	51
Table 6.3.5	Gini Coefficients for Uganda .....	52
Table 6.3.6(a)	Poverty by Sector of Household Head 2002/2003 .....	53
Table 6.3.6(b)	Poverty by Sector of Household Head 1999/2000.....	53
Table 7.1.1	Indicators of Household Members' Welfare by Residence (%age).....	55
Table 7.2.1	Indicators of Household Members' Welfare by Region (%age) .....	56
Table 7.5.1	Reaction of Household when they ran out of Salt (%age).....	58
Table 7.6.1	Feeding Habits of Household members (%age).....	59
Table 7.7.1	Breakfast for Children Aged 0-4 years (%age).....	59
Table 7.8.1	Safety of Household members from Crime and Violence (%age) .....	60
Table 7.9.1	Delivery of Justice .....	60
Table 8.1.1	Number of Households operating Enterprises .....	63
Table 8.2.1	Household Enterprises by Region .....	64
Table 8.3.1	Number of Household Enterprises by Residence.....	64
Table 8.4.1	Total Persons Engaged in Enterprises by sector.....	65
Table 8.5.1	Persons Engaged by Activity Status .....	66
Table 8.6.1	Persons Engaged by Sex .....	66
Table 8.7.1	Paid Employees by Gender and Industry.....	67
Table 8.8.1	Ownership of Enterprises by Residence .....	67
Table 8.9.1	How the Business was acquired .....	68
Table 8.10.1	Duration of Businesses .....	68
Table 8.11.1	Duration of Businesses being Operational .....	69
Table 8.12.1	Major Sources of Finance.....	70
Table 8.13.1	Security Required for the Loan.....	70
Table 8.14.1	Types of Markets for Products .....	71
Table 8.15.1	Major Problems in setting up Enterprises .....	72
Table 8.16.1	Rating of Turnover .....	72
Table 8.17.1	Performance of Activity .....	73
Table 8.18.1	Gross Output and Value Added by Industry (Million Shs).....	74
Table 8.19.1	Gross Output and Value Added b Regions (Million Shs) .....	75
Table 8.20.1	Gross Output by Industry .....	75



## **EXECUTIVE SUMMARY**

---

- Introduction** The Uganda Bureau of Statistics (UBOS) under the Ministry of Finance, Planning and Economic Development has conducted National Household Surveys since 1988. The 2002/2003 survey focused on four modules namely; the Socio-Economic, Labour force, Informal sector and the Community Modules. The survey covered 55 districts of Uganda, with some parts of Gulu and Kitgum districts not fully covered due to insecurity. Pader District was not covered at all.
- Population** The 2002/03 survey findings estimate the population of Uganda at around 25 million. The average household size is estimated at 5 persons per household. Like in the previous surveys, a large proportion of the population is below 15 years of age, with the majority of household members being children of the household head, which trend has been the same over years.
- Education** The Poverty Monitoring and Evaluation Strategy targets 98 percent primary school enrollment by the year 2003. The results of the survey reveal that in spite of efforts made so far, Net Primary Enrollment for children aged 6-12 is below the target at 86 percent. This is partly caused by the fact that some children enroll late for primary school. The results also show that many children continue to attend primary school after the official age of 12. For example, more than half of all children aged 13-18 years attend primary school.
- In addition, households report that the monetary costs related to schooling deter participation to a certain extent. The results show that the percentage enrolled increases with increased household wealth. There are consistent differences in educational attainment and in literacy, and these differences are consistent across regions, both by sex and income bracket. The northern region consistently emerges worse-off in almost every education indicator.
- Health** About twenty eight percent of the country's population fell sick in the 30 days preceding the survey with malaria/fever reported as the major cause of ill health. Of those who fell sick, many practiced self-treatment while others preferred to go to private clinics. Usage of mosquito nets remains low with only 11 percent of the population using them.

Awareness of HIV/AIDS is almost universal. However it is not matched by knowledge of specific ways to avoid HIV/AIDS. The condom however is most mentioned as the specific method one can use to avoid HIV/AIDS. The radio is reported to be the main medium through which people acquire information on HIV/AIDS.

**Housing and Household Characteristics**

Most of the housing and household conditions have improved especially the housing structure i.e. wall, roof and floor. Households are still dependent on “tadoba” for lighting and worse still, the majority of the households depend on wood as fuel for cooking.

**Household Expenditure and Poverty Estimates**

The 2002/03 survey has shown an increase in Per-household and Per-capita expenditure. Foods, Beverages and Tobacco still dominate the household budget share, despite a drop of 8 percent observed over the same period. However, these changes have not been high enough to over turn the observed increases in poverty levels.

**Poverty increased from 34 to 38 percent**

The percentage of the population living below the poverty line rose from 34 percent to 38 percent. This rise is statistically significant. The main finding is that, despite some very modest economic growth, poverty increased. This is in contrast to trends in the 1990s, where growth was stronger and appeared to be broadly shared.

**Welfare Indicators**

There has been a general downward trend in the welfare indicators between 1999/00 and 2002/03 periods.

Ownership of clothes declined between the 1999/00 and 2002/03 periods while ownership of bicycles and radios has improved over the same period.

One in every 5 children aged 0 – 5 years, in the eastern and northern regions does without breakfast.

**Informal Sector**

About 36 percent of the households in Uganda own non-crop enterprises. The major enterprises being in the manufacturing and trade and services broad industries. These two categories employ 1.8 million persons while livestock, poultry, bee-keeping, and fishing industry employs another 0.5 million persons. Most household based enterprises are sole proprietorship, and similarly there are mainly started by owners.

## **CHAPTER ONE**

### **INTRODUCTION**

---

#### **1.1 Background**

Data and information have long been recognized as key to informed decision making the world over. This principle however, deteriorated in the 1970s and early 1980s. Reliable data on key performance indicators was either incomplete or not available. Since 1986 however, the demand for reliable data and information has become the icon for policy makers as well as development partners in Uganda. Today, Uganda is recognized for having a series of large datasets from the household surveys that have been conducted since 1988 by the Uganda Bureau of Statistics.

The household survey series was revived with the conducting of the Household Budget Survey in 1988/89. This was followed by the Integrated Household Survey (IHS) conducted in 1992/93, Monitoring Surveys of 1993/94, 1994/95, 1995/96 and 1997. In 1999/00, another household survey was undertaken covering a much larger sample than the previous monitoring surveys. The Uganda National Household Survey 2002/03 (UNHS 2002/03) is the latest in a series of household surveys undertaken by UBOS.

Government has developed the Poverty Eradication Action Plan (PEAP) with the overall objective of reducing mass poverty to less than 10 percent by the year 2017. The information from the household surveys provides the basis for monitoring poverty levels as well as other government programmes and policies.

#### **1.2 Survey Objectives**

The main objective of the Uganda National Household Survey 2002/03 was to collect high quality and timely data on demographic and socio-economic characteristics of household population for monitoring development performance of the country. Specifically, the survey aimed at:

- (a) Providing information on the economic characteristics of the population and its economic activity status i.e. the employment, unemployment and underemployment.

**Objective of UNHS  
2002/03 Survey**

- (b) Generating data for calculating gross output, value added, and other economic indicators required for National Accounts purposes.
- (c) Integrating household socio-economic and community level surveys in the overall survey programme so as to provide an integrated data set. This will provide an understanding of the mechanisms and effects of various government programmes and policy measures on a comparative basis over time;
- (d) Meeting special data needs of users for the Ministries of Health; Education; Gender, Labour and Social Development and other collaborating Institutions, together with donors and the NGO community so as to monitor the progress of their activities and interventions
- (e) Generating and building social and economic indicators for monitoring the progress made towards social and economic development goals of the country

### **1.3 Scope and Coverage**

#### **Scope and Coverage**

The UNHS 2002/03 was conducted in all districts except Pader. Some parts of Kitgum and Gulu districts were also not covered due to insecurity.

The survey included the following modules:

- **Socio-economic module:** This provided information on characteristics of household members, health seeking behaviour of household members, prevention, channels of communication and HIV/AIDS, education and literacy, housing and household conditions, household consumption and non consumption expenditure, household and enterprise assets and welfare indicators. This report is based on this module.
- **Labour Force module:** This was for determining the total work force and deriving related parameters; current and usual activity status of household members, number of hours worked, previous employment, unemployment details, and the extent of child labour.
- **Informal Sector:** This module collected information about household enterprises and rural-based small-scale establishments. These are

businesses undertaken by households with or without a fixed location<sup>1</sup>.

In addition, inputs and outputs of these enterprises for the major items were also collected. The components of the informal sector survey included;

- Livestock, poultry, bee-keeping, and fishing,
- Forestry
- Mining, quarrying and manufacturing
- Hotels, lodges and eating places
- Trade and services

In addition, the household survey investigated household and non-household based enterprises/establishments and was limited to:

1. Household based Enterprises in both rural and urban areas identified at listing stage.
  2. Non-household based Enterprises in the rural areas<sup>2</sup>. These were identified at the listing stage with assistance of the LC 1 guide.
- **The Community Survey:** This module gathered information about the community (LC1). The information collected related to;
    - (i) Community characteristics,
    - (ii) Community history and major events including access to and availability of social services namely schools, clinics, outlets for agricultural and non agricultural produce,
    - (iii) Land tenure,
    - (iv) Whether the community received the 25 percent Graduated Tax,
    - (iv) Community projects undertaken in the three years preceding the survey and,
    - (v) Characteristic of the Education and Health infrastructure used by the community

## **Sampling Design**

The UNHS sample was drawn through a stratified two-stage sampling design. The Enumeration Area (EA) was used as the first stage sampling unit and the household as the second stage-sampling unit. The sampling frame used for selection of first stage units (fsus) was the list of EAs with the number of households based on the cartographic work of the 2002 Population and

---

<sup>1</sup> Businesses managed by households without a fixed location were classified as household enterprises. On the other hand, those with fixed location but employing less than five employees were classified as establishments.

Housing Census. A total of 972 EAs (565 in rural and 407 in urban areas) were covered<sup>3</sup>. In order to select the second stage units, which are the households, a listing exercise using listing schedules was done in all selected EAs. Details of the sampling design are given in Appendix III.

**Sample Size**

The sample size was determined by taking into consideration several factors, the three most important being: the degree of precision (reliability) desired for the survey estimates, the cost and operational limitations, and the efficiency of the design. UNHS 2002/03 covered a sample of 9,711 households.

**Survey Organization**

The Survey staff comprised of a total of 15 field teams. Fieldwork was undertaken with the use of centrally recruited field teams whereby work in the sampled areas was programmed from the headquarters. There are four Statistical Regions, and the teams were recruited based on the languages most prevalent in each region. Four teams were recruited for each region. The data collection exercise started in May 2002 through April 2003 with a break in September 2002 due to the Census exercise.

**Questionnaires**

Nine types of questionnaires were used during the UNHS 2002/03 namely, the Household Listing questionnaire, the Socioeconomic questionnaire, the Labourforce questionnaire, the Community questionnaire, Forestry Enterprise questionnaire, Trade and Services Enterprise questionnaire, Manufacturing, Mining and Quarrying Enterprise questionnaire, Livestock Enterprise questionnaire and Hotel Enterprise questionnaire. The last five questionnaires were administered to small-scale establishments and household enterprises. These were developed in consultation with various stakeholders. The household listing questionnaire was used to list all houses and households in the selected Enumeration Areas (EAs). Finally, the community questionnaire was administered at community level (Local Council level I).

**Data Processing**

After fieldwork, all questionnaires were returned to UBOS for data processing. A manual system of editing questionnaires was set up and a set of scrutiny notes to guide in manual checking was developed. In addition, range and consistency checks were included in the data-entry program. More intensive and thorough checks were carried out using MS-ACCESS by the processing team. Data entry and editing started in June 2002.

---

<sup>2</sup> The Census of Business Establishments (COBE) field teams covered the non-household based enterprises in urban areas

<sup>3</sup> A total of 1000 EAs was initially selected but 27 EAs could not be covered because of insecurity

**Coverage Rate**

The coverage rate for the UNHS 2002/03 was approximately 97%. A total of 9711 households were interviewed out of the 10,000 households initially targeted. A total of 289 households could not be interviewed mainly due to insecurity.

## CHAPTER TWO

### CHARACTERISTICS OF HOUSEHOLD MEMBERS

#### 2.1 Population

##### 2.1.1 Introduction

Uganda has undertaken six Population Censuses almost decennially since 1948, the latest being in 2002. However, Household Surveys have provided estimates on various characteristics of the household and the household population during the inter-censual periods.

This chapter presents some of the demographic characteristics of the household population from the findings of the Uganda National Household Survey 2002/03, It provides highlights on population size, age, sex, household composition and orphanhood, among others. Distributions by urban-rural residence as well as regional distribution of these characteristics are also given.

##### 2.1.2 Population by Age and Sex

The age and sex composition of a population is mainly determined by the past fertility and mortality trends. Based on the 2002/3 Uganda National Household Survey, the population of Uganda is estimated to be around 25 million. Table 2.1.1 shows the breakdown of the population by sex, indicating a proportion of more females (51.6%) than males (48.4%). The sex ratio is estimated at around 95 males for every 100 females. The table also shows that the male-female proportion of the population has been similar since 1992/93.

**Table 2.1.1: Population by Sex**

	1992/93		1997		1999/00		2002/03	
	Pop. (millions)	%	Pop. (millions)	%	Pop. (millions)	%	Pop. (millions)	%
<b>Total</b>	<b>17.7</b>	<b>100.0</b>	<b>19.4</b>	<b>100.0</b>	<b>21.4</b>	<b>100.0</b>	<b>25.3</b>	<b>100.0</b>
Male	8.7	49.2	9.5	48.9	10.5	49.2	12.3	48.4
Female	9.0	50.8	9.9	51.1	10.9	50.8	13.0	51.6
Sex Ratio		96.5		95.7		96.2		94.6

The population of Uganda estimated to be 25 million

Slightly more than half of the population is below 15 years of age

Table 2.1.2 shows that the majority of the country's population is young with 53 percent of males and 51 percent of females below 15 years of age. However, the population in the urban areas is fairly older with the population in the working ages (15 – 64 years) being more than 50 percent of either sex. The elderly (65 years and above) constitute only 2 percent of the population of either sex.



**Table 2.1.2: Population by Age, Sex and Residence, 2002/03 (%age)**

Age group	Rural			Urban			Total		
	Percent								
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
0-14	54.6	53.1	53.8	45.6	41.1	43.2	53.3	51.4	52.4
15-64	42.8	44.8	43.9	53.3	57.4	55.5	44.3	46.6	45.5
65+	2.6	2.1	2.3	1.1	1.5	1.3	2.4	2.0	2.2

**A very slight increase in urban population**

From the survey results, it was revealed that the proportion of the population living in urban areas<sup>1</sup> has slightly increased since the last survey period. Table 2.1.3 shows a slight increase in the proportion of the population residing in urban areas from 13 percent in 1999/00 to 14 percent in 2002/03.

**Table 2.1.3: Population by Residence (%age)**

	1992/93	1997	1999/00	2002/03
	Percent			
<b>Uganda</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Rural	88	87	87	86
Urban	12	13	13	14

## 2.2 Households<sup>2</sup>

### 2.2.1 Number of Households

**Urban households doubled in ten years**

There has generally been an increase in the number of households in Uganda over the years. The number of households in urban areas has doubled over the ten-year period (1992/93 – 2002/03). Table 2.2.1 shows a marginal increase in the proportion of households in the urban areas, from 16 percent in 1999/00 to 17 percent in 2002/03. This increase in the number of households corresponds to the increase in household population.

**Table 2.2.1: Households by Location**

	1992/93		1999/00		2002/03	
	Number (millions)	%age	Number (millions)	%age	Number (millions)	%age
<b>Total</b>	<b>3.4</b>	<b>100</b>	<b>4.2</b>	<b>100</b>	<b>4.9</b>	<b>100</b>
Rural	3.0	87	3.5	84	4.1	83
Urban	0.4	13	0.7	16	0.8	17

<sup>1</sup> Urban areas included the entire Kampala District, all Municipalities, all District Towns, all Gazetted Town Councils and Town Boards and other big Trading Centres.

<sup>2</sup> A household is defined as a person or group of persons who normally live and eat together.

### 2.2.2 Average Household Size

Average household size remains 5 persons

The average household size in Uganda in the 2002/03 survey was estimated at about 5 persons. This is very close to the 1999/00 estimate of 5.2 persons. Table 2.2.2 shows that the average household size is bigger in rural areas than in urban areas. It should however be noted that the trend of average household sizes between survey years has been almost similar in both rural and urban areas and across regions.

**Table 2.2.2: Average Household Size by Residence and Region**

Average Household Size				
	1992/93	1997	1999/00	2002/03
<b>Total</b>	<b>4.8</b>	<b>5.0</b>	<b>5.2</b>	<b>5.1</b>
Rural	4.9	5.1	5.4	5.3
Urban	4.1	4.4	4.4	4.1
Central	4.4	4.6	4.8	4.8
Eastern	4.9	5.1	5.3	5.5
Northern	5.1	5.0	5.3	5.1
Western	4.9	5.3	5.7	5.2

Household size largest in the eastern region and lowest in central region

The findings also show that the eastern region had the largest average household size (5.5 persons), while the central region had the lowest. In the 1999/00 survey, the western region reported the largest average household size, while the central region still had the lowest.

### 2.2.3 Household Headship

For each of the households, information was sought on the composition of household members. Each household had only one member designated as the Household Head who was defined as the member under whose guidance, the major decisions of the household are undertaken. The majority of household heads are in the age group 26–49 years, as was observed in the previous surveys. The survey results however show an increase in the proportion of household heads in the categories of 25 years and below, since 1999/00.

**Table 2.2.3: Household Heads by Age Group and Sex (%age)**

Household Head									
Age group	1997			1999/00			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Below 18	0.4	0.5	0.4	0.2	0.2	0.2	0.3	0.6	0.4
18 – 25	17.7	11.0	15.9	11.3	9.1	10.7	16.3	12.7	15.4
26 – 49	57.8	52.1	56.2	56.9	50.4	57.3	62.9	59.3	61.9
50+	24.2	36.4	27.5	28.7	40.3	31.8	20.5	27.5	22.3

Decrease in proportion of female-headed households in rural areas

Table 2.2.4 shows that the proportion of female-headed households in the rural areas has been decreasing while that of the urban areas increased since 1999/00. Regional differences however indicate a general drop in the proportion of female-headed households, except for a slight increase in the western region.

**Table 2.2.4: Household Headship by Residence, Sex and Region (%age)**

Residence	Household Head					
	1997		1999/00		2002/03	
	Male	Female	Male	Female	Male	Female
<b>Total</b>	<b>72.7</b>	<b>27.3</b>	<b>72.9</b>	<b>26.4</b>	<b>73.9</b>	<b>26.1</b>
Rural	73.3	26.7	<b>73.6</b>	31.1	76.0	24.0
Urban	72.7	30.7	68.9	27.1	64.1	35.9
Central	70.9	29.1	70.7	29.3	70.9	29.1
Eastern	75.5	24.5	75.8	24.2	77.3	22.7
Northern	76.9	23.1	65.4	34.6	68.6	31.4
Western	66.5	33.5	78.4	21.6	78.3	21.7

### 2.3 Household Composition

More than half of the household members are children of the household head

The findings indicate that the proportion of biological children of the household head constitute over 50 percent of the total household population. The pattern is similar for both rural as well as urban areas. Table 2.3.1 also indicates that the proportion of other relatives staying in the household is higher in urban areas than in rural areas. This household composition is similar to the 1999/00 survey findings.

**Table 2.3.1: Distribution of Household Composition by Residence**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
	Percent					
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Head	18.2	21.7	18.6	18.8	24.3	19.5
Spouse	12.5	11.7	12.4	13.4	12.2	13.3
Son/Daughter	52.7	44.3	51.6	53.2	42.2	51.7
Other relatives	16.0	19.9	16.5	13.8	18.3	14.4
Non relatives	0.6	2.4	0.8	0.8	3.0	1.1

### 2.4 Orphanhood<sup>1</sup>

14 percent of the children below 18 years have lost at least one parent

Table 2.4.1 shows the proportion of children by sex, location and age by survival status of their parents. It can be noted that overall, about 14 percent of

<sup>1</sup> An orphan was defined as a person below the age of 18, who has lost one or both parents.

the children have lost one or both parents. Out of the total children, 3.2 percent had lost both parents, while 2.2 percent had lost their mothers. 8.4 percent of the children reported having lost their fathers. From the results it is noted that paternal orphanhood is more common than maternal orphanhood. An almost similar trend can be observed across regions as well as by different age groups.

**Table 2.4.1: Children aged less than 18 years by Survival Status of their Parents (%age)**

Background characteristics	Both parents alive	Only mother alive	Only father alive	None Alive	Do not know/Missing	Total
<b>Total</b>	<b>85.8</b>	<b>8.4</b>	<b>2.2</b>	<b>3.2</b>	<b>0.3</b>	<b>100</b>
Male	86.0	8.2	2.3	3.3	0.2	100
Female	85.5	8.7	2.2	3.2	0.4	100
Rural	79.0	11.4	3.4	4.3	0.6	100
Urban	84.2	8.0	2.1	3.1	0.3	100
Central	83.7	8.8	2.9	4.1	0.5	100
Eastern	88.5	7.4	1.9	2.0	0.2	100
Northern	86.0	8.4	2.2	3.6	0.3	100
Western	84.8	10.0	2.2	3.3	0.3	100
0-4	95.0	3.3	0.7	0.8	0.2	100
5-9	87.8	7.7	2.1	2.1	0.3	100
10-14	78.0	12.4	3.4	5.8	0.4	100
15-17	72.4	15.3	4.3	7.1	0.9	100

## **2.5 Summary of Findings**

The 2002/03 survey findings estimate the population of Uganda at around 25 million. The average household size was estimated at 5 persons per household.

Like in the previous surveys, a large proportion of the population is below 15 years of age, with the majority of household members being biological children of the household head. This trend has generally been the same over years.

The survey results also indicate that a large proportion of orphans had lost their fathers compared to those that had lost their mothers.

## CHAPTER THREE

### EDUCATION

---

#### 3.0 Introduction

**Education is an essential human right**

Basic education is a fundamental human right and a component of well being. Education attainment has been identified as one of the essential approaches for combating poverty. Indeed it is a core aspect in the Poverty Eradication Action Plan. This is of relevance because societies with low educational levels are less likely to attain and maintain high levels of economic growth. They are also more exposed to corruption and political manipulation, as well as violence and civil strife, occurrences that undermine human well-being and economic development.

The Government of Uganda put in place the policy of Universal Primary Education in 1997, as well as achieving Functional Adult Literacy (FAL). Before it was implemented the cost of education constituted a major obstacle to primary school attendance. As a result enrollment in primary schools rose drastically from 2.3 million in 1996 to 5.3 million in 1997. In 2002/03 total enrollment in primary school is estimated to be 7.5 million pupils.

This chapter reports on the major indicators that have been generated from the survey results, to enable assessment of the progress made in the education sector so far. To the extent possible, comparison is made with indicators from previous surveys to give a picture of the general trend.

#### 3.1 Education Attainment of the Population

**17% of the population has never had any formal education**

Information was collected about the highest education level of each member of the household. Table 3.1.1 shows that 17 percent of the population aged 15 years and above have never had any formal education, and 44 percent have not completed primary education. The proportion of people without any formal education is higher in the rural areas (19 percent in rural compared to 7 percent in urban areas) and among females (24 percent) compared to males (10 percent).

**Table 3.1.1: Educational attainment of the Population aged 15 years and above (%age)**

Background Characteristic	No formal schooling	Some Primary	Completed Primary 7	Some Sec.	Complete S6	Post Sec.	All
<b>Total</b>	<b>17</b>	<b>44</b>	<b>14</b>	<b>21</b>	<b>1</b>	<b>2</b>	<b>100</b>
<b>Sex</b>							
<b>Male</b>	10	44	16	25	2	3	100
Female	24	43	12	18	1	2	100
<b>Residence</b>							
Urban	7	27	16	37	5	8	100
Rural	19	47	13	18	1	1	100
<b>Region</b>							
Kampala	4	20	17	40	7	1	100
Central	12	43	16	25	2	2	100
Eastern	17	50	12	19	1	1	100
Northern	30	46	11	12	0	1	100
Western	19	43	15	21	1	2	100

**One in five of rural residents have not had any formal education**

Table 3.1.1 also shows that 19 percent (almost one out of five) rural residents have had no formal education while the ratio is one in fourteen for urban areas. Considerable regional differences exist with the northern region having 30 percent of its population above 15 that has never had any formal schooling, and the central region showing only 12 percent.

The results also show that the proportion with post secondary education is higher in the urban areas (8 percent) compared to the rural areas (1 percent), and that the central region has the largest proportion of people with post-secondary education.

The survey collected data on household consumption expenditure as a proxy for household income. This enables the ranking of the households on the basis of their welfare and its relationship with education attainment.

**Table 3.1.2: Educational Attainment of the Population by Wealth Quintile (%age)**

Quintile	No formal schooling	Some Primary	Completed Primary 7	Some Secondary	Completed S6	More than Secondary	All
Lowest Quintile	35	50	8	7	0*	0*	100
Second Quintile	21	54	13	12	0*	0*	100
Middle Quintile	15	49	15	19	1	1	100
Fourth Quintile	11	43	17	25	2	2	100
Richest Quintile	7	27	15	39	4	8	100

\* Percentage is so small that it rounds off to zero

**Education Attainment increases with Income Class**

The results show that there is a direct relationship between household income and the education attainment of its members. In the lowest quintile 35 percent of the household members have had no formal education, compared with 15 percent in the middle quintile and 7 percent in the highest quintile. Similarly, the proportion that has had secondary education increases persistently as one moves from the poorest to the richest quintile.

### 3.2 Literacy Status of Household Members

It is desirable for an individual to be literate (defined as the ability to read with understanding and write meaningfully), so as to be able to understand basic instructions on say, a bottle of medicine, or a bag of fertilizers. In the survey, respondents who had attended school beyond the primary level were assumed to be literate, and were not asked whether they are literate or not. Individuals who were aged 10 years or more and had not completed primary education were specifically asked whether they were able to read or write.

**Literacy has continued to rise over the years, but with a persistent gender differential**

In Table 3.2.1 it can be seen that the literacy status for the population aged 10 years and above has risen to 70 percent in 2002/03 from 65 percent in the 1997 Survey. There are persistent gender variations with the female literacy rate being estimated at 63 percent while the male literacy rate is 77 percent. The table also shows that there are rural-urban differentials, with the literacy rates being higher in the urban (87 percent) than rural areas (67 percent).

**Table 3.2.1: Literacy Rates for the Population 10 Years and above**

	1997			1999/00			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>74</b>	<b>57</b>	<b>65</b>	<b>74</b>	<b>57</b>	<b>65</b>	<b>77</b>	<b>63</b>	<b>70</b>
Urban	89	79	83	92	82	86	90	84	87
Rural	70	49	59	72	54	62	74	60	67
Kampala	-	-	-	-	-	-	94	91	92
Central	81	74	77	81	74	77	82	74	79
Eastern	72	52	62	72	52	62	72	54	63
Northern	72	38	55	64	33	47	72	42	56
Western	70	51	60	74	61	67	79	69	74

**Increase in Literacy highest in Northern and Western Regions**

Among the regions, the central region has the highest literacy rate (79 percent) and the northern region has the least (56 percent). It can be seen that the literacy rates have risen fastest in the northern region (from 47 in 1999/00 to 56 percent in 2002/03) and in the western region (from 67 to 74 percent) within the same period.

**Adult Literacy Rate is estimated at 69 percent**

The estimated adult literacy rate (for the population aged 18 years and over) is estimated to be 69 percent, a 6 percent point increase from the preceding 1999/00 survey as can be seen from Table 3.2.1. This increase in adult literacy may be attributed to the Functional Adult Literacy (FAL) programmes in the country. Between the regions, the central region has the highest rate of 82 percent compared to 58 percent in the Northern region.

**Males have a higher literacy rate than females**

Generally at all levels, males have higher literacy rates than their female counterparts, but the disparity is more pronounced in the Northern region where the literacy rate among males is nearly twice that of females. There has however been some minimal increase in the adult literacy rates between the reported survey years.

**Table 3.2.2: Literacy Rates for the Population Aged 18 Years and above**

Region/ Area	1997			1999/00			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>75</b>	<b>51</b>	<b>62</b>	<b>77</b>	<b>51</b>	<b>63</b>	<b>80</b>	<b>59</b>	<b>69</b>
Urban	91	80	85	93	82	87	91	84	87
Rural	73	46	58	75	47	59	77	54	65
Kampala							94	93	93
Central	82	71	76	84	71	77	86	79	82
Eastern	67	42	54	74	45	59	74	47	60
Northern	77	37	54	71	27	46	78	42	58
Western	75	48	61	76	55	65	79	64	71

### 3.3 Total Primary School Enrollment

**Total primary enrollment is estimated to be 7.5m**

The estimated number of children attending primary school is 7.5 million. This is consistent with the Ministry of Education and Sports, which quotes 7.4 million in its 2002 Education Statistics Abstract.

**Table 3.3.1: Changes in Total Primary Enrollment (000's of pupils)**

Survey Year	Male	Female	Total	MOES Estimate Census
1997	2,972	2,590	5,562	5,304*
1999/00	3,554	3,162	6,716	6,591*
2002/03	3,745	3,794	7,538	7,400

\*These figures are published in the Education Abstract and refer to calendar years.

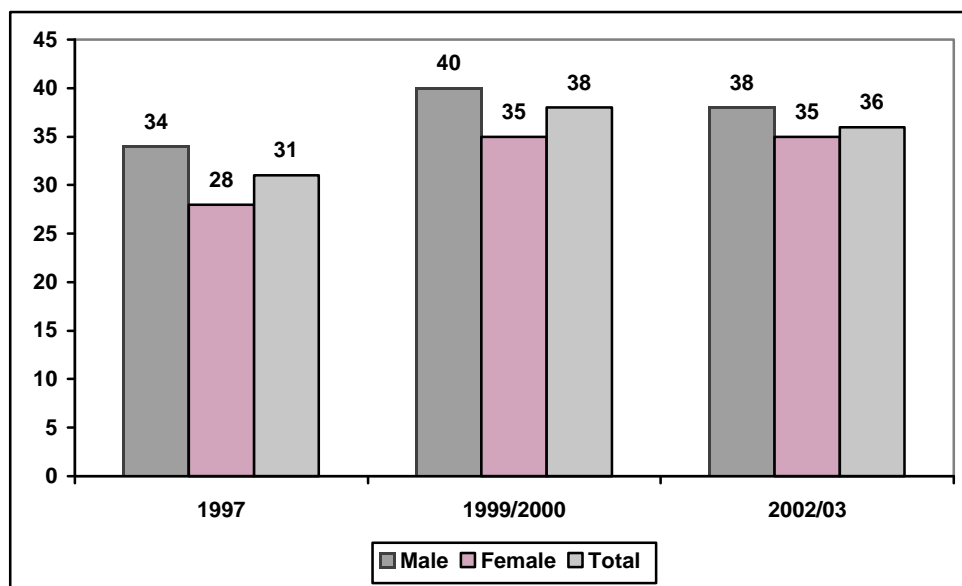


**The Crude Enrollment Ratio slightly decreased since 1999/00**

### 3.4 Enrollment in Primary School

The Crude Enrollment Ratio (CER) is the ratio of the total enrollment at all education levels to the total population i.e. the proportion of the population enrolled in school at the primary, secondary, university and other tertiary levels. Figure 3.4.1 shows that this ratio increased between the 1997 and 1999/00 surveys but has remained about the same between 1999/00 and 2002/03.

Figure 3.4.1: Crude Enrollment Ratio by Survey Year



### 3.5 Net Primary School Enrollment Ratio (NER)

Access to primary education has been identified as one of the ways to reduce poverty in Uganda. Access to primary education is partly measured by the Net Primary School enrollment Ratio (NER) which is the ratio of pupils 6 -12 years attending primary to the total number of children in the same age range in the population. The NER is one of the critical indicators that have been selected as areas of focus in the Poverty Eradication Action Plan.

**Net Primary Enrollment Ratio is estimated to be 86 percent**

Table 3.5.1 shows that the Net Primary Enrollment Ratio (also referred to as the Net Attendance Ratio) is estimated to be 86 percent in 2002/03. The NER has not changed considerably between the 1999/00 and the 2002/03 surveys. The table also shows that there are no major gender differences in enrollment at the primary level. It is however possible that those gender differences in enrollment exist at the secondary and higher levels of education.

**Table 3.5.1: Net Primary School Enrollment Ratio**

Survey year	Male	Female	Total
1997	86	83	84
1999/00	85	84	84
2001 UDES	87	87	87
2002/03	85	86	86

**29 percent of children aged 6 years have never attended school**

Ideally, given the UPE program, the NER should have been 100 percent. However age-specific schooling characteristics for children aged 6-12 years given in Table 3.5.1 show that 29 percent of children aged 6 years have never attended school, but this proportion decreases rapidly with increasing age, which implies that many children start school after age 6.

**Table 3.5.2: Schooling Status for Children Aged 6–12 Years (%age)**

Characteristic	Never attended	Dropped out	Pre-Primary	Attending Primary	Total
<b>Total</b>	<b>10</b>	<b>1</b>	<b>3</b>	<b>86</b>	<b>100</b>
<b>Age</b>					
6	29	1	11	59	100
7	14	1	7	78	100
8	6	2	2	90	100
9	4	1	1	94	100
10	4	1	1	94	100
11	3	1	0*	96	100
12	3	2	0*	95	100
<b>Sex</b>					
Male	10	1	4	85	100
Female	10	1	3	86	100
<b>Residence</b>					
Rural	11	1	3	85	100
Urban	4	1	4	90	100
<b>Region</b>					
Kampala	1	1	5	93	100
Central	7	1	7	85	100
Eastern	7	1	1	90	100
Northern	21	2	0*	77	100
Western	9	1	3	87	100

\* Percentage is so small that it rounds off to zero.

**Northern Region has the highest % of children who have never attended school**

Across regions, the northern region is worst affected where 21 percent of the children aged 6–12 have never attended school, compared with 9 percent in the western region and 7 percent in the central region. The results also show that 11 percent of children in rural areas have never gone to school compared to only 6 percent of children in urban areas.

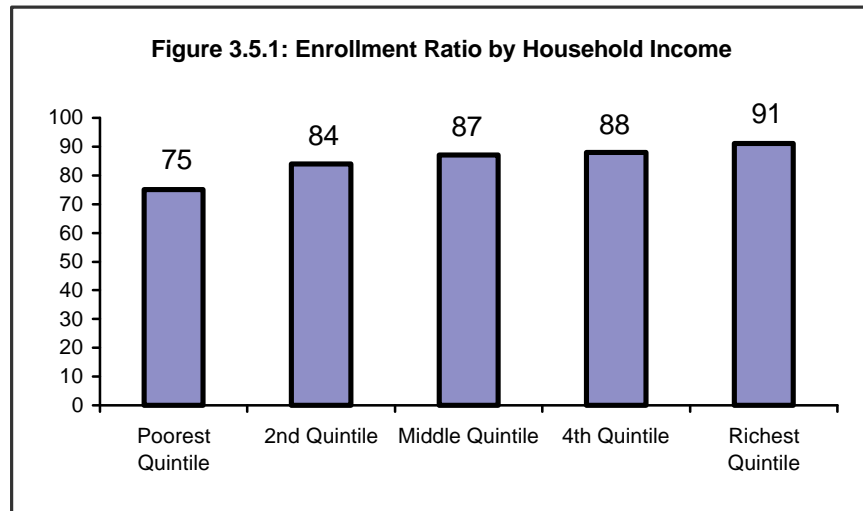
Table 3.5.2 also shows that a considerable proportion of the children aged 6 and 7 who should be attending primary school are instead attending pre-primary school. This pre-primary schooling is more practiced in urban areas and in the central and western regions.

**Enrollment ratio increases with the pupil's age**

The table above also shows that school participation is nearly complete in the 9–12 age range. This suggests that some of the bottlenecks that affect attendance at younger ages gradually phase out allowing for near total participation.

**Non-attendance is more pronounced in poorer households**

From Figure 3.5.1 it is clear that income plays an important role in children's enrollment. Children from poorer households are less likely to enroll in primary school. In the poorest quintile the NER is 75 percent, compared to 91 percent in the highest quintile. This shows that although UPE is operational, there are other related costs that hinder school attendance.



### 3.6 Reasons for Never Attending School

**Most of the children who do not attend school are seen as too young by their parents**

Persons in the age range 6 - 25 who had never attended school were asked why they did not do so. Table 3.6.1 shows the results for the population aged 6-12 only. For more than half of the children who never attended school, it was felt that they were too young to attend. Indifference to education and cost were the next most cited reasons. At seven percent, the proportion mentioning cost as a reason was the same between 1999/00 and 2002/03. Orphanhood also seems to be a hindrance to school attendance. The need to work, illness and other reasons were not major constraints to school attendance.

**Table 3.6.1: Reasons for Never Attending School by Sex, for Children aged 6-12 Years (%age)**

Reason for Never Attending	1999/00			2002/03		
	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Too young	52	61	59	53	54	53
Indifferent	20	18	19	13	14	13
Cost	6	8	7	7	6	7
Needed to Work	5	5	5	8	5	6
Sick	4	1	3	6	6	6
Disabled	4	3	4	2	5	4
Orphaned	0	1	0	8	7	8
Other reasons	3	3	3	3	3	3

**Cost is the leading cause of school dropout**

### 3.7 Reasons for Dropping out of School

Sometimes pupils attend school and then drop out. It is imperative to find out why these children drop out given that primary education is, to a large extent, free. The survey found out that the majority of children who dropped out did so due to costs, and this proportion rose from 56 percent in 1999/00 to 63 percent in 2002/03. Besides tuition which is covered by Government under UPE, there are other costs related to school attendance like uniforms, exercise books, transportation, boarding fees, and these are prohibitive to the households. Illness or calamities in the family were also among the main causes of dropout mentioned. There are no systematic differences by sex in the causes of dropping out.

**Table 3.7.1: Percentage Dropping Out of School by Reason**

Reason for Dropping Out	1999/00			2002/03		
	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Cost	61	49	56	65	62	63
Sickness or calamity in family	7	12	10	8	4	6
Completed a desired level	5	0	3	4	4	4
Domestic work	4	4	4	2	2	2
Need to work	2	4	3	4	1	3
Transport	2	2	2	0	0	0
Pregnancy	-	10	5	-	9	5
Other	18	18	18	11	10	10

**Percentage enrolled at right age is small**

### 3.8 Proportion of Children Attending at the Right Age

In Uganda, the recommended age for entry in primary one is 6 years. Such children are therefore expected to be in Primary 7 at the age of 12. Table 3.8.1 shows that the proportion attending at the right age is generally very low. For example only 26 percent of the children in P1 are aged 6. This implies that three quarters of children are late in enrolling, and only 11 percent of the children in P7 are aged 12. There are no major gender differences over time in the percentages enrolling at the right age.

**Table 3.8.1: Percentage of Children Attending at the Right Age**

Grade & Official Age	1997			1999/00			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
P1 – Age 6	24	23	24	29	28	29	25	28	26
P2 – Age 7	11	12	11	19	19	19	16	18	17
P3 – Age 8	7	9	8	14	14	14	16	17	16
P4 – Age 9	6	6	6	9	11	10	9	9	10
P5 – Age 10	4	6	5	7	10	9	10	10	10
P6 – Age 11	3	5	4	4	4	4	5	9	7
P7 – Age 12	4	12	7	7	10	9	9	14	11

The proportion attending at the right age is low partly because a considerable proportion joining primary do so after 6 years.

### 3.9 Average Age of Pupils Attending Each Class of Primary School

Average age in each class is higher than official

The average age of pupils attending each class are shown in Table 3.9.1. The mean age for children in Primary 1 is 7 years while that of children in Primary 7 is 15 years. While there are no discernable gender differences in the lower classes (i.e. below P5), there is a difference in the higher classes. Boys tend to attend at a slightly older age than girls. Over the years the average age seems to be falling slightly.

**Table 3.9.1: Mean Age for Children Attending Primary School**

Grade	1999/00			2001 UDES			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary 1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	6.9	7.0
Primary 2	8.7	8.6	8.7	8.8	8.6	8.7	8.6	8.4	8.5
Primary 3	10.4	10.1	10.3	10.3	9.9	10.1	10.0	9.8	9.9
Primary 4	11.7	11.4	11.6	11.7	11.3	11.5	11.4	11.1	11.3
Primary 5	13.2	12.6	12.9	12.8	12.4	12.6	12.9	12.4	12.7
Primary 6	14.3	13.6	14.0	14.0	13.4	13.7	14.1	13.5	13.8
Primary 7	15.6	14.6	15.1	14.9	14.2	14.6	15.2	14.3	14.7

### 3.10 Schooling Characteristics of Children Aged 3 – 5 Years

About half of children aged 5 attend either nursery or primary school

Table 3.10.1 shows that 3 quarters of children aged 3-5 years do not attend school, and that about 14 percent attend pre-primary school institutions normally referred to as nursery schools. The attendance rates are lower in the rural areas where there are generally fewer pre-primary schools. About 28 percent of children aged 5 attend primary school, and if these children continue in the schooling system without repetition, they also have an effect on the proportion of children not attending at the right age.

**Table 3.10.1: Schooling Status of Children 3-5 years (%age)**

Characteristics	Never attended School	Attending Pre-primary	Attending Primary	Total
Total	75	14	11	100
Age				
3	96	4	0	100
4	76	15	9	100
5	50	22	28	100
Sex				
Male	76	13	11	100
Female	74	14	12	100
Residence				
Rural	55	34	10	100
Urban	78	10	12	100
Region				
Kampala	44	49	8	100
Central	66	25	9	100
Eastern	82	6	12	100
Northern	86	2	12	100
Western	74	14	12	100

**Start of school does not favour any sex**

The table also shows that parents do not seem to favor girls or boys when deciding when their children should start school. Boys and girls aged 3 - 5 are equally likely to attend pre-primary and primary school.

The central region has the biggest proportion of children between 3 and 5 years who are attending pre-primary institutions or kindergarten, while Northern region has the least percentage in this category.

**3.11 Schooling Characteristics of Students Aged 13–18 years**

**Over half of Children aged 13-18 attend Primary School**

The schooling characteristics of the population aged 13–18 years is shown in Table 3.11.1. The table shows that more than half of all children in this age range (56 percent) are attending primary school, only 18 percent are attending post-primary institutions, including secondary schools, and 21 percent report having dropped out of school.

**Table 3.11.1: Schooling Status of Students 13-18 Years**

Background Characteristic	Never attended	Left school	Attending Primary	Attending Post-Primary	Total
<b>Total</b>	<b>2</b>	<b>21</b>	<b>56</b>	<b>18</b>	<b>100</b>
<i>Age</i>					
13	2	5	89	4	100
14	3	9	77	10	100
15	4	15	62	19	100
16	4	26	45	25	100
17	5	32	31	32	100
18	7	49	15	28	100
<i>Sex</i>					
Male	3	19	59	19	100
Female	5	23	54	18	100
<i>Residence</i>					
Rural	2	31	34	33	100
Urban	4	20	60	16	100
<i>Region</i>					
Kampala	2	42	20	36	100
Central	2	24	49	25	100
Eastern	2	17	63	18	100
Northern	12	19	64	5	100
Western	2	20	60	17	100

**Primary school drop out increases with age**

The proportion attending primary school decreases from 89 percent at age 13 to 15 percent at age 18, while the proportion that dropped out of school increases from 5 at age 13 to almost 50 percent at age 18. Furthermore, children aged 13-18 residing in rural areas are more likely to attend primary school late than their urban counterparts.

**3.12 Distribution of Primary Schools by Management**

All children who were attending primary school were asked about the management of the primary school attended: whether the school was government, private, religious, community-based or managed by an NGO.

**Table 3.12.1: School Type for Children Attending Primary School (%)**

Background Characteristic	Government	Private	Others	Total
Uganda	84	13	3	100
Urban	55	43	2	100
Rural	88	10	2	100
Kampala	18	82	0	100
Central	67	29	3	100
Eastern	94	4	2	100
Northern	94	2	4	100
Western	89	8	3	100

**Pupils in primary school mainly attend government-funded schools**

The information in Table 3.12.1 shows that the majority of pupils in the country attend government-managed schools. However in the urban areas (compared to rural areas) and the central region (compared to other regions) there is a higher proportion of pupils attending private primary schools than government-sponsored schools and rural areas. In Kampala district, the majority (82 percent) of pupils attend private schools.

### 3.13 Distribution of School Type

**Majority of pupils attend day schools**

Information was gathered on the type of school attended by the primary school children, whether it was a day school, a boarding school or both day and boarding. Table 3.13.1 shows that the majority of the pupils attend day primary schools. At the national level, only 2 percent of children reported that they attend boarding schools, while 6 percent attend schools that are both day and boarding and 92 percent attend day schools. However children in urban areas are more likely to attend either day schools or schools that are both day-and boarding compared to children in rural areas.

**Table 3.13.1: School Type for Children Attending Primary School (%age)**

Background Characteristic	Day	Boarding	Both Day and Boarding	Total
Uganda	92	2	6	100
Urban	82	2	16	100
Rural	93	2	5	100
Kampala	92	6	3	100
Central	85	13	2	100
Eastern	94	4	2	100
Northern	95	3	2	100
Western	92	6	2	100

**Over three-quarters do not receive meals at school**

### 3.14 Provision of Meals at School

During the survey children attending day primary schools were asked whether the school provides any meals. Table 3.14.1 shows that in Uganda 77 percent of children in day primary schools do not receive meals at school. Children in the central and eastern regions are more likely to receive meals compared to children in the northern and western regions. In the west, hardly any children receive meals at school.

**Table 3.14.1: Distribution of Schools with Provision of Meals in School (%age)**

Background Characteristic	Meals at School		Total
	Yes	No	
Uganda	23	77	100
Urban	37	63	100
Rural	22	78	100
Kampala	61	39	100
Central	39	61	100
Eastern	33	67	100
Northern	13	87	100
Western	2	98	100

It is possible that the children who do not receive meals at school carry some food from their homes.

### 3.15 Summary of Findings

**98% is the target NER in the PEAP, but the reality is 85%**

The Poverty Monitoring and Evaluation Strategy targets 98 percent primary school enrollment by the year 2003. The results of the survey reveal that in spite of efforts made so far, Net Primary Enrollment for children aged 6-12 is below the target at 86 percent. This is partly caused by the fact that some children enroll late for primary school. The results also show that many children continue to attend primary school after the official age of 12. For example, more than half of all children aged 13-18 years attend primary school.

In addition, households report that the monetary costs related to schooling deter participation to a certain extent. The results show that the percentage enrolled increases with increased household income. There are consistent differences in educational attainment and in literacy, and these differences are consistent across regions, and by sex and income bracket. Lastly, the northern region consistently emerges worse-off in almost every education indicator.



## **CHAPTER FOUR**

### **HEALTH**

---

#### **4.0 Introduction**

Health is an important characteristic of the population. Improving the quality of life and enhancing the human capital of the poor comprise an essential component of Uganda's Poverty Eradication Action Plan (PEAP). In setting out what public actions are called for to enhance the quality of life of the poor, the government of Uganda through the Poverty Eradication Action Plan (PEAP) seeks to improve the provision of basic services, particularly health care; access to safe water and sanitation. To this end, the National Health Policy (NHP) and the Health Sector Strategic Plan (HSSP) were developed in consultation with all stakeholders in the health sector to act as a guide in addressing the state of ill health in the country.

Four types of indicators are used to analyze the health status of the population. These indicators include nutritional status, disease status, and availability of health care services and use of these services by the households. The UNHS 1999/00 and UNHS 2002/03 included questions that would contribute to the monitoring of these indicators of health in Uganda and hence the basis of this chapter.

Information on incidence of illness/injury during the last 30 days, the type of medical attention sought and distance to the health facility was recorded. Similarly, information on possession and usage of mosquito nets as well as awareness and knowledge of ways to avoid HIV/AIDS was collected.

#### **4.1 Incidence of Sickness**

The second Participatory Poverty Assessment (PPA II) report quoted ill health as the most frequent cause and consequence of poverty both in rural and urban areas. This is mainly because it reduces one's time for productive work. In the same report, AIDS and malaria were specifically mentioned as crippling people's productive capacity.

The UNHS 2002/03 collected information on the illnesses/injuries suffered by respondents during the period of 30 days preceding the date of interview. Information was also collected on the number of days lost due to the illness or injury.

28 percent of the population reported an illness or injury

Table 4.1.1 shows that 28 percent of the population fell sick in the 30 days preceding the survey. This level of incidence is similar to what was observed in 1999/00. The incidence of disease is about the same in rural and urban areas.

Eastern Region registered highest % of illnesses

At regional level, the eastern region registered the highest percentage (35 percent) of illnesses/injury compared to other regions. The percentage of people reporting illnesses or injuries in the central region increased between 1999/00 and 2002/03, while other regions registered a slight decline.

**Table 4.1.1: Population Reported illness/Injured during the Last 30 Days (%age)**

	1997			1999/00			2002/03		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Uganda</b>	<b>31</b>	<b>35</b>	<b>33</b>	<b>26</b>	<b>30</b>	<b>28</b>	<b>27</b>	<b>29</b>	<b>28</b>
Urban	32	36	34	26	30	28	25	29	27
Rural	27	29	28	24	29	27	27	30	29
<b>Region</b>									
Central	27	29	28	22	25	23	27	28	27
Eastern	43	47	45	34	40	37	32	37	35
Northern	28	34	31	25	29	27	23	26	25
Western	24	28	26	22	26	24	23	25	24

#### 4.2 Major Causes of Morbidity

Malaria/fever accounts for more than half of the illnesses

Malaria is still the main cause of ill health in Uganda. Table 4.2.1 shows that malaria accounted for more than 50 percent of all the persons who fell sick. Diseases due to poor sanitation, specifically diarrhoea were also reported as common causes of ill health. The proportion was higher in urban areas than in rural areas. Respiratory infections were the second most common cause of sickness and accounted for 14 percent. Generally, the proportion of the population that suffered from respiratory illnesses increased especially in rural areas.

**Table 4.2.1: Population by Type of Illness/injury Suffered (%age)**

Illness/Injury	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Fever/Malaria	56	59	56	55	60	56
Respiratory	12	15	12	14	16	14
Intestinal infection	6	4	6	5	3	4
Diarrhea	5	3	5	4	2	4
Skin infection	3	3	3	3	2	3
Other illnesses	18	16	18	19	17	19

### 4.3 Medical Attention Sought

Private clinics are the most widely preferred source of health care

The delivery of health services in Uganda is a collective undertaking by government, NGOs and the Private sector. Table 4.3.1 shows that private clinic and drug shops continue to feature prominently as an alternative and supplement to government services. This is indicative of a pattern in the health seeking behaviour consistent with previous survey findings. Urban areas are more likely to use private clinics while the people in rural areas show a greater preference for drug shops.

Around 10 percent of the population that fell sick practiced self-medication

Home treatment in Uganda is still a common practice although the percentage of home-treated cases has decreased. The findings show that 11 percent of the people that fell sick administered own medication at home. This cuts across rural and urban areas but has halved compared to 1999/00.

The HSSP uses Outpatient–Department (OPD) attendance as one of the performance indicators in assessment of achievements of the health sector. However, despite the fact that government outpatient health facilities were reported as the third most important source of health care, their percentage share decreased by 9 percentage points between 1999 and 2002. The extent however differs according to rural or urban residence as reflected in table 4.3.1 below.

**Table 4.3.1: Type of Medical Attention Sought (%age)**

Medical attention	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Private Clinic	27	44	29	34	52	36
Home treatment	23	20	23	12	10	11
Outdoor patient in Hospital	18	17	18	9	11	9
None	8	4	8	7	6	7
Dispensary	8	2	7	7	2	6
Health Centre	3	1	3	12	4	11
Drug Shop	10	9	10	14	8	13
Pharmacy	0	1	0	0	4	1
Traditional Doctor	1	1	1	1	1	1
Indoor patient in Hospital	2	1	2	2	3	2

### 4.4 Average Distance to the Health Facility

The average distance to a health facility is 5 km

Lack of access to health care has been identified as one of the hindrances to good health. One of the objectives of the HSSP (2000) is to improve access to health facilities so that 80 percent of the population lives within 5 km of a health facility by the year 2005.

Distance to health facility significantly lower in urban compared to rural areas

Table 4.4.1 shows that the average distance to any health facility is 5 km. The distance is significantly shorter for the urban population at only 2 km. The mean distance to hospitals increased from 9 to 12 kms, while that to private clinics remained at only 3 kms. This may partly explain the preference for clinics, drug shops and home treatment because these are nearest to their localities.

**Table 4.4.1: Distance to a Health Facility (km)**

Health facility	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Uganda	5	2	5	5	2	5
Hospital	10	4	9	13	6	12
Clinic	3	1	3	4	1	3
Dispensary	4	2	4	4	2	4
Health Centre	5	4	5	4	3	4
Drug shop	2	1	2	2	1	2
Traditional doctor	4	-	4	3	4	3

#### 4.5 Diarrhoea Prevalence

Higher diarrhoea prevalence in rural areas

Diarrhoea was identified as the fourth most important cause of morbidity. Table 4.5.1 classifies diarrhoea cases into two broad age groups by residence and region. The proportion of persons who reported an episode of diarrhoea during the 30 days preceding the date of interview is nearly twice as high among children as in adults. Respondents in rural areas reported a higher percentage of diarrhoea cases than those residing in urban areas while the northern region presented the highest percentage of diarrhoea cases among the regions.

**Table 4.5.1: Diarrhoea Prevalence 2002/03 (%age)**

Background characteristics	Diarrhoea in the preceding 30 days		
	Children (Below 18 years)	Adults (Above 18 years)	Total
<b>Residence</b>			
Rural	1.5	0.8	1.2
Urban	0.8	0.4	0.6
<b>Region</b>			
Central	0.6	0.3	0.5
Eastern	2.0	1.2	1.7
Northern	2.8	1.9	2.5
Western	0.5	0.1	0.4

#### 4.6 Mosquito Net Utilization

Malaria is a major public health concern in Uganda since it is the leading cause of morbidity and mortality. In such a situation, the use of mosquito nets is important as a protection from the disease.

**Only 11 percent of Ugandans use mosquito nets**

Mosquito net usage is still low with only 11 percent of Ugandans reporting usage of mosquito nets. People in urban areas, however, reported greater usage of mosquito nets as compared to their rural counterparts. Similarly, the central region reported a slightly higher proportion of mosquito net users as compared to other regions.

**Children use mosquito nets less than adults**

Although it is known that Malaria mostly affects children, mosquito net usage is still lower among children as compared to adults with only 8 percent of children using a mosquito net in comparison to 15 percent of adults. This disadvantaged position of children is consistent across residence and region.

**Table 4.6.1: Use of Mosquito Nets 2002/03 (%age)**

Background characteristics	Usually sleeps under a mosquito net		
	Children (Below 18 years)	Adults (Above 18 years)	Total
<b>Uganda</b>	<b>8</b>	<b>15</b>	<b>11</b>
<b>Residence</b>			
Rural	6	11	8
Urban	24	33	28
<b>Region</b>			
Central	11	19	14
Eastern	8	14	10
Northern	7	13	9
Western	6	12	9

#### 4.7 HIV/AIDS

The prevalence of HIV/AIDS is one of the indicators that are currently used to assess performance of the Health sector in the PEAP. The target for the PEAP is to reduce HIV/AIDS prevalence to 5 percent by 2005.

Since there is no cure for HIV/AIDS, the main strategy for combating the disease has been prevention through practicing abstinence, being faithful to one sexual partner and using condoms. However the strategy depends heavily on the level of knowledge of the population and their perception of the HIV/AIDS problem.

The UNHS 2002/03 sought to gauge the levels of knowledge of HIV/AIDS and the behaviors people adopt to protect themselves against infection. It was noted that while awareness of HIV/AIDS was almost universal, it was not matched by knowledge of ways to avoid it.

**90 percent of persons aged above 10 years have heard about HIV/AIDS**

Table 4.7.1 reveals that awareness of HIV/AIDS is generally high with 90 percent of respondents aged ten years and above reporting that they have heard of HIV/AIDS.

**Table 4.7.1: Awareness about HIV/AIDS among the Population aged 10 and above, 2002/03**

Background characteristics	Sex		Total
	Male	Female	
<b>Total</b>	<b>90</b>	<b>90</b>	<b>90</b>
<b>Residence</b>			
Rural	89	89	89
Urban	93	94	93
<b>Region</b>			
Central	89	89	89
Eastern	88	89	89
Northern	89	87	88
Western	91	92	92

**More than half of the population knows at least two ways to avoid HIV/AIDS**

There are three recognized ways to avoid contracting HIV/AIDS. These include using condoms, abstinence and faithfulness. In the UNHS 2002/03, respondents were asked to spontaneously mention which of these methods they had heard of. Of these three methods, the condom was most acknowledged as a way of avoiding HIV/AIDS. Table 4.7.2 shows that more than half of the population know of at least two ways of avoiding contracting HIV/AIDS, and this is almost similar across marital status, residence and region. Knowledge of these ways is highest among those aged 20-49 years.

**Table 4.7.2: Knowledge of Specific Ways to Avoid HIV/AIDS (%age)**

Background characteristics	Knowledge of programmatically important ways		Knowledge of specific ways		
	None	Two or more ways	Only one way		
			Abstinence	Faithfulness	Use of condoms
Uganda	1	54	12	15	17
<b>Age</b>					
10-19	2	44	23	6	24
20-29	1	61	6	14	18
30-39	1	62	6	18	13
40-49	1	60	8	22	9
50-59	2	50	14	27	7
60+	3	44	20	24	8
<b>Marital status</b>					
Unmarried	2	48	20	6	25
Married (monogamous)	1	60	6	21	12
Married (polygamous)	1	58	7	22	12
Divorced	1	57	12	12	18
Widowed	4	47	21	17	10
<b>Residence</b>					
Rural	2	52	13	16	17
Urban	1	64	10	8	17
<b>Region</b>					
Central	1	61	8	10	20
Eastern	2	57	11	14	16
Northern	2	54	11	22	10
Western	1	44	19	17	18

The knowledge of HIV/AIDS may be viewed as the ultimate outcome of communication and education programs. Information access is therefore essential in increasing people's knowledge and awareness of what is taking place around them. This may eventually affect their perceptions and behavior.

The UNHS 2002/03 collected data about the main sources of information on HIV/AIDS. The findings presented in Table 4.7.3 show that the radio is the main source of information on HIV/AIDS (60 percent). Men were more likely to get this information from the radio as compared to females. Similarly urban areas present a higher percentage of persons who get this information from the radio.

Health workers who are supposed to give information on HIV/AIDS, still do so on a low scale possibly due to the absence of counselors at health centers. Nevertheless, more females than males get information on HIV/AIDS from health workers and friends. The same sources are more commonly used by rural dwellers compared to urban dwellers.

**The Radio is the main channel of information on HIV/AIDS**

Teachers are among the major sources of information on HIV/AIDS. This reaffirms the important role of education programmes in the dissemination of information on HIV/AIDS.

**Table 4.7.3: Main Channels of Information on HIV/AIDS (%age)**

Information source	Sex		Residence		Total
	Male	Female	Rural	Urban	
Radio	63	56	58	66	60
Friends	13	15	15	10	14
Health workers	6	9	8	6	8
Teachers	8	7	7	8	8
Family	3	5	4	3	4
Other	7	8	8	7	7

#### **4.8 Summary of Findings**

About twenty eight percent of the country's population fell sick in the 30 days preceding the survey and malaria/fever was reported as the major cause of ill health. Those who fell sick got treatment from three main sources namely private clinics, out-patient facilities and self-treatment while others preferred to go to private clinics.

With regard to usage of mosquito nets, only 11 percent of the population use mosquito nets. However, mosquito net usage amongst children is almost half of that for adults.

Finally, while awareness of HIV/AIDS is almost universal, it is not matched by the knowledge of specific ways to avoid HIV/AIDS. However the condom is mentioned most as the specific method one can use to avoid HIV/AIDS while the radio is reported to be the main medium through which people acquire information on HIV/AIDS.



## CHAPTER FIVE

### HOUSING AND HOUSEHOLD CHARACTERISTICS

---

#### 5.0 Introduction

In chapter two, some basic characteristics of the household were covered and this chapter gives a more detailed account of the other household and housing characteristics.

Housing is a critical indicator of poverty and as such the Uganda National Household Survey took it as one of the components of the socio-economic module. Questions related to type of housing unit, occupancy tenure, type of dwelling unit, number of rooms for sleeping, land tenure of plot and types of roof, wall and floor were addressed. Household conditions were also looked at to assess the type of fuel/power used for both lighting and cooking.

Improved water supply is important for improving the health and the quality of life of the population. The Poverty Eradication Action Plan (PEAP) target for the water sector is to provide safe drinking water to all by 2015 and adequate water for livestock. The survey therefore assessed availability and distance to the source of drinking water.

In addition, other conditions of the household looked at included type of toilet facilities, methods of solid waste disposal, availability and type of kitchen and bathroom, the modes of communication and main source of information. In a number of instances, comparisons have been made with the 1999/00 survey where similar questions were asked and Kampala district has been separated from Central region because of being a city.

#### 5.1 Housing Conditions

##### 5.1.1 Type of Housing Unit

#### **Most of the occupants stay in detached houses**

More than half of the households (56 percent) lived in detached houses. This distribution is similar to what was observed in 1999/00. (Table 5.1.1). This varies considerably across the regions with Western region having the highest percentage of detached houses of 80 percent as compared to Northern region with only 16 percent. The distribution of type of housing unit varies quite widely within regions. While the majority of households in Northern region live in huts (80 percent), there are hardly any huts in Central and Western regions. There has been no significant change in the distribution of the type of dwelling unit between the two survey periods.

**Table 5.1.1: Dwelling Type by Region (%age)**

Type of Dwelling	2002/03					Total
	Kampala	Central	Eastern	Northern	Western	
Total	100	100	100	100	100	100
Detached	34	74	49	16	80	56
Huts	0	3	37	80	5	26
Muzigo	64	23	12	3	15	17
Others**	2	0	2	1	0	1
	1999/00					
Detached	32	77	51	15	88	58
Huts	0	3	37	82	4	27
Muzigo	64	17	9	2	8	13
Others***	4	3	3	1	0	2

\* Very small but not zero \*\*\* Others include flats and any other houses not described

### 5.1.2 Occupancy Tenure of Dwelling Unit

**Owner-occupied houses dominate in northern Uganda**

Table 5.1.2 below shows that about 78 percent of the population occupied their own houses whereas 18 percent rented. Generally, owner occupied houses dominate in all regions with northern having the highest percentage (90 percent). Rented houses are very significant in Kampala (65 percent)

**Table 5.1.2: Occupancy Tenure of Dwelling Unit (%age)**

	2002/03					Total
	Kampala	Central	Eastern	Northern	Western	
Total	100	100	100	100	100	100
Owner Occupied	28	71	86	90	81	78
Rented	65	23	12	6	15	18
Free	7	6	4	4	4	4

### 5.1.3 Number of Rooms Used for Sleeping

**44 percent of the dwelling units have one bedroom**

Forty four percent of the households live in a one bed-roomed house as given in Table 5.1.3. The percentage is higher for urban areas (62 percent) compared to the rural areas (40 percent). Only 26 percent of the households have more than two rooms for sleeping.

**Table 5.1.3: Number of Rooms Used for Sleeping by Residence (%age)**

No. of Rooms	2002/03		Total
	Rural	Urban	
Total	100	100	100
One	40	62	44
Two	32	21	30
More that two	28	17	26

### 5.1.4 Land Tenure of Plots

**Most of the land is customary owned.**

Fifty four percent of the households reported the land tenure of their plots on which the house stood as customarily owned. The land type mix varied considerably across the regions. While Northern region had the highest number of households living on customary ownership (85 percent), free-hold was most common in Central region. Seventy percent of the households in central region

reported owning their plots by freehold, and 12 percent of the households in the same region owned mailo land. Table 5.1.4 below gives the regional distribution of land tenure of plots.

**Table 5.1.4: Type of Land Tenure of Plot (%age)**

	Kampala	Central	Eastern	Northern	Western	Total
Total	100	100	100	100	100	100
Customary	5	12	73	85	50	54
Free hold	62	70	20	4	44	35
Mailo land	15	13	2	0	1	4
Leasehold	18	3	4	3	3	4
Don't know	0	2	1	8	2	3

## 5.2 Household Conditions

### 5.2.1 Types of Roof, Wall and Floor

The type of materials used in the construction of the roof, wall and floor of a house is a good indicator of how well off households are in terms of housing. The survey collected data on these items and the results of this analysis are given below.

**Iron sheet roofed houses are on the increase while thatched houses are decreasing**

The percentage of iron sheet roofed houses has increased by six percentage points since the 1999/00 survey in Table 5.2.1 (57 to 63 percent). Also, there has been an increase in use of iron sheets in rural areas (52 to 59 percent) over the years. As a result, thatched roofs have gone down from 42 to only 35 percent over the same period.

**Mud and poles walls still on the decline**

Since the 1999/00 survey, mud and poles walls have declined while use of bricks has increased. This is a welcome indicator that households are improving housing conditions. Use of mud and poles for the walls have gone down from 56 percent in 1999/00 to only 46 percent in 2002/03 whereas households using bricks have increased by 11 percentage points i.e. from 40 percent in 1999/00 to 51 percent in 2002/03. Rural areas registered a bigger increase (34 to 45 percent) in the use of bricks than urban areas (72 and 77 percent).

**Earth floors still high but declining while cement floors are on the increase**

The results show that earth floors are still predominant but decreasing while cemented floors are on the increase. As expected, most of the rural homes have rammed earth floors (83 percent) as compared to urban homes (27 percent). Across the regions, the central region has close to 50 percent of the floors with cement whereas in the northern region, only 6 percent of the floors are cemented.

**Table 5.2.1: Households by Type of Roof, Wall and Floor (%age)**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
<b>Type of roof</b>						
Total	100	100	100	100	100	100
Iron Sheets	52	87	57	59	86	63
Thatched	48	8	42	41	8	35
Other roof	0	5	1	0	5	1
<b>Type of Wall</b>						
Bricks	34	72	40	45	77	51
Mud and Poles	63	23	56	52	17	46
Other wall	3	5	4	3	6	3
<b>Type of Floor</b>						
Cement	12	72	22	15	67	24
Earth	88	28	78	83	27	73
Concrete/stone	0	0	0	1	5	3
Other	0	0	0	1	1	0

*Other roof includes tins, concrete, tiles, asbestos and any other roof.*

*Other wall includes wood, stone with cement, cement blocks and any others.*

*Other floor includes wood and any other not explained.*

### 5.2.2 Fuel for Cooking

#### Charcoal Usage Increasing

The government's objectives in the energy sector are to promote universal access to adequate, affordable, high quality, safe and environmentally acceptable energy services. These alternative fuels should replace the traditional ones. Table 5.2.2 shows that nearly all households use wood fuel. Charcoal use increased from 14 percent in the 1999/00 survey to 18 percent in 2002/03. Use of electricity and paraffin for cooking is still very low (4 percent). The biggest part of the population still use firewood though this has gone down from 84 percent in 1999/00 to 78 percent in 2002/03.

**Table 5.2.2: Households by Fuel Used for Cooking (%age)**

Type of fuel	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Total	100	100	100	100	100	100
Firewood	96	20	84	90	22	78
Charcoal	4	70	14	8	67	18
Paraffin	0	5	1	1	5	2
Electricity	0	3	1	0	3	1
Other	0	2	0	1	3	1

*Other includes gas, cow-dung and any other fuel*

### 5.2.3 Fuel for Lighting

#### Less than 10 percent of the households use electricity for lighting

Government in its programs has been campaigning for rural electrification, which has already started in some districts. The survey among other things tried to investigate the type of fuel used for lighting. The results in table 5.2.3 show that 9 percent of the households use electricity for lighting, a slight increase from 7 percent in 1999/00. This is still low but there is an improvement. It should be noted that electricity use for lighting is highest in Kampala (55 percent). A big proportion of the population especially in rural areas (70 percent) still use tadoba for lighting though lantern use has increased

from 14 to 15 percent over the same period. This is reflected in table 5.2.3 below.

**Table 5.2.3: Households' Source of Fuel for Lighting by Residence (%age)**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Total	100	100	100	100	100	100
Tadoba (paraffin)	80	29	72	78	30	70
Lantern (paraffin)	11	30	14	14	25	15
Electricity	1	40	7	3	40	9
Other	8	1	7	5	5	6

*Other includes gas, candle wax, firewood, cowdung and any other fuel not defined.*

**Table 5.2.4: Households' Source of Fuel for Lighting by Region (%age)**

	2002/03					
	Kampala	Central	Eastern	Northern	Western	Total
Total	100	100	100	100	100	100
Tadoba	12	68	83	74	72	70
Lantern	27	17	11	8	20	15
Electricity	55	13	4	1	5	9
Other	6	2	2	*17	3	6

*For Northern region the 'all other' was mainly referring to firewood*

### 5.3 Quality and Availability of Safe Drinking Water

**70 percent of the households have access to safe drinking water**

Since the early 1990s, government has been trying to improve the management and delivery of water and sanitation services. Generally the responsibility falls under the Ministry of Water, Lands and Environment though in about 12 urban areas, the National Water and Sewerage Corporation is responsible for the provision of water and sewerage services. Water is normally classified as safe if it is drawn from a tap (piped), boreholes or protected wells and/or springs. It should be noted that though gravity flow scheme water is sometimes piped, it is not categorized as safe water. The survey results in Table 5.3.1 show that 68 percent of the households have access to safe drinking water with 84 percent in urban areas and 57 percent in rural areas. There has been an increase in the proportion of the rural households having access to safe drinking water since the 1999/00 survey. In contrast, fewer urban households have access to safe water today than they were in 1999/00. The rapid urbanization must have overwhelmed the provision of water in urban areas.

**Table 5.3.1: Households having Access to Safe Drinking Water by Residence (%age)**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Total	100	100	100	100	100	100
Safe water	51	87	57	57	84	68
Unsafe water	49	13	43	43	16	32

#### 5.4 Type of Toilet Facilities

Over 10 percent of Households do not have toilet facilities

The pit latrine is still the predominant toilet facility being used by 86 percent of the households. There is however 13 percent of the households that still use the bush for a toilet, which is highly unhealthy. The pattern is quite similar to 1999/00. This information is depicted in Table 5.4.1 below.

**Table 5.4.1: Households with Toilet Facilities by Residence (%age)**

Type of Toilet	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Total	100	100	100	100	100	100
Pit latrine	82	89	83	84	92	86
Bush/No toilet	17	2	14	15	1	13
Flush Toilet	0	8	2	0	6	1
Other	1	1	1	1	1	0

*This figure is not zero but very small*

#### 5.5 Solid Waste Disposal

Half of households dispose solid waste in gardens

Nearly one half (49 percent) of the households dispose solid waste in gardens with only 3 percent using skip bins. The distribution varies greatly between rural and urban areas. Skip bins are more commonly used in urban areas (16 percent of the households). Pit and heap disposal are less hygienic in urban areas where there are population concentrations. Table 5.5.1 shows the distribution of disposal of solid waste by residence.

**Table 5.5.1: Methods of Solid Waste Disposal by Residence (%age)**

	Rural	Urban	Total
Total	100	100	100
Garden	56	13	49
Pit	22	19	22
Heap	12	32	15
Burning	5	16	7
Skip Bin	1	16	3
Other	4	4	4

#### 5.6 Types of Bathrooms Used

One in every three households have no bathrooms

Forty eight percent of the households reported having bathrooms outside or inside the dwelling, which were not makeshift. Central region had the highest percentage of 55 percent. For those households with no bathrooms, the regional distribution shows that Northern region has the highest percentage (46 percent) as compared to 27 percent in Central region. Overall 34 percent of the households reported having no bathrooms. Table 5.6.1 below shows this distribution.

**Table 5.6.1: Households Owning Bathrooms by Region (%age)**

	Kampala	Central	Eastern	Northern	Western	Total
Total	100	100	100	100	100	100
Inside	18	7	3	1	3	5
Outside Built	65	39	47	32	45	43
Outside Makeshift	8	21	15	21	20	18
None	27	32	35	46	32	34

### 5.7 Types of Kitchen Used

A kitchen is a very useful facility if hygiene in the home is to be maintained. A question was asked to find out what type of kitchen the household used. The results from the survey show that 31 percent do not have kitchens. The biggest percentage (58%) is found in urban centres as compared to 25 percent in rural areas. Most of the households in Western and Eastern regions reported having kitchens as compared to the other regions. Table 5.7.1 below shows kitchen use by residence.

**Table 5.7.1: Households with Kitchens by Region and Residence (%age)**

	Type of Kitchen				Total
	Inside	Outside built	Outside Makeshift	None	
Region					
Total	3	60	6	31	100
Kampala	14	11	15	60	100
Central	3	54	9	34	100
Eastern	2	72	3	24	100
Northern	3	54	2	41	100
Western	2	72	8	19	100
Residence					
Rural	2	67	6	25	100
Urban	10	23	9	58	100

### 5.8 Ownership of Mode of Communication

The government of Uganda has been implementing some reforms in the communications sector aimed at improving communication within and out of the country. These include the licensing of mobile phone companies and the separation of postal from communication services. Despite all this, a lot still needs to be done to improve the communications sector. Questions on ownership of television, radio, fixed phone, mobile phone, postal address and e-mail address were asked to assess how household members communicated. The results indicate that 63 percent of the households own radios while only 7 percent have television sets. 7 percent own mobile phones with 25 percent in urban areas and only 3 percent in rural areas. Fixed phones and e-mail addresses are almost non-existent except in Kampala. Table 5.8.1 shows the distribution by region.

**About a third of the population have no kitchens**

**Two out of three households own radios**

**Table 5.8.1: Ownership of Communication Equipment by Region (age%)**

	Kampala	Central	Eastern	Northern	Western	Total
Total	100	100	100	100	100	100
Radio	80	75	57	38	73	63
Television	37	11	3	0	2	7
Mobile Phone	35	8	3	2	4	7
Fixed Phone	3	0	0	0	0	0
Postal Address	8	1	1	1	2	2
E-mail Address	8	1	0	0	0	1

### 5.9 Main Source of Information

**One in three of the households depend on word of mouth for information**

The population virtually depends on electronic media (mainly radio as seen in Table 5.9.1 below) as the main source of information (60 percent). Also over a third of the households depend on word of mouth as their main source of information. This dependence on word of mouth can easily lead to misinformation. A negligible percentage of the respondents read newspapers. This might be a result of the cost of the print media. The table below shows the main sources of information by residence.

**Table 5.9.1: Main Source of Information by Residence (%age)**

	Rural	Urban	Total
Total	100	100	100
Electronic	57	75	60
Word of mouth	40	20	37
Print	1	3	1
Hand mail	1	2	2
Post mail	1	0	0

### 5.10 Summary of Findings

Most of the housing and household conditions have improved especially the housing structure i.e. wall, roof and floor. Households are still dependent on tadoba for lighting and worse still, people are also over depending on the use of wood fuel for cooking.

The population needs to be sensitized about reading newspapers in order to improve on their way of receiving information other than depending on word of mouth.



## **CHAPTER SIX**

### **HOUSEHOLD EXPENDITURE AND POVERTY ESTIMATES**

#### **6.0 Introduction**

Household expenditure and poverty estimates are the subject of this chapter. Collection of consumption and non-consumption expenditure data remains a key component in the National Household Surveys. These data have been useful in monitoring the living standards of Ugandans. In section one, the methods used in the analysis are presented. Changes in household expenditures in general, and household consumption expenditure in particular are discussed in section two. Section three is a presentation and discussion of the poverty estimates prior to the summary and conclusions. These estimates are derived using the methods applied to earlier surveys presented in Appleton (2001a,b). It should be emphasised that more work is still being done to improve on these estimates.

#### **6.1 Methodology**

In measuring poverty, there are three critical issues: how to measure welfare, how to set the poverty line and how to aggregate over individuals. These issues are addressed in details in Appendix II (A & B).

##### **6.1.1 Data Transformation**

Both the 1999/00 and 2002/03 surveys shared very similar consumption sections, with almost the same list of item codes and identical recall periods. Although, 2002/03 survey includes a few items not listed separately in 1999/00 survey, these changes are minor and mainly reflect new areas of consumption such as mobile phones. Different recall periods were used to capture information on different sub-components of household expenditures. While a 7-day recall period was used for expenditure on food, beverages and tobacco, a 30-day recall period was used in the case of household consumption expenditure on non-durable goods and frequently purchased services. For the non-consumption expenditures and semi-durable and durable goods and services a 365-day recall period was used.

In the survey, all purchases by household members and items received free as gifts were valued and recorded as per the current prices. The items consumed out of home produce were valued at the current farm-gate/producer prices while rent for owner occupied houses was also imputed at current market

prices. Food consumptions includes food consumed from own production, purchases and free collection/gifts.

Expenditure data are collected on item by item basis. The expenditures were aggregated according to the recall period used and by broader sub-components of expenditures to a household level. Given the different recall periods used to collect data on household expenditures, some conversion factors were applied to change the data on a monthly basis. After which all the different sub-components of the expenditures were aggregated to derive the total expenditures at household level. There is a distinction between consumption expenditure and total expenditures. The former refers to expenditure excluding non-consumption expenditure, whereas the latter includes the non-consumption expenditure sub-component.

Further adjustments were made in the construction of the consumption aggregate used later on in the estimation of poverty estimates. These adjustments included accounting for inter-temporal and inter-spatial price variations, revaluation of foods derived from own consumption into market prices and finally accounting for household composition in terms of sex and age.

The 2002/03 survey was nationally representative except in so far as certain areas could not be surveyed due to insecurity. These areas comprised certain parts of Gulu and Kitgum districts, together with the whole of Pader, a new district previously part of Kitgum. The 1999/00 survey had excluded Bundibugyo, Gulu, Kasese and Kitgum. Consequently, in order to establish comparability, in our main estimates, we exclude the four districts not covered by 1999/00 survey. However, we also report estimates for the population covered by 2002/03 survey. The detailed discussions that follow are restricted to the same districts covered in both surveys unless otherwise stated.

## **6.2 Consumption Expenditure**

This section presents and discusses changes in expenditures between the two surveys. Expenditure per household, per capita and per adult equivalent has been considered. Share of the expenditure by group item is presented to give insights into the changes in budget shares in the two surveys.

**A 4 percent real increase in monthly household expenditure between 1999/00 and 2002/03**

### 6.2.1 Consumption Expenditure Per Household

Table 6.2.1 presents the monthly consumption expenditure per household for the 1999/00 and 2002/03 after adjusting for inflation. Uganda's average household monthly expenditure rose from Shs. 134,100 to Shs. 139,300, representing a real increase of 4 percent within a period of almost three years. The increase is mainly driven by the observed increases in the rural areas, while the per household expenditure remained more or less the same for the urban areas over the same period.

Disaggregating the results by region some observations do emerge. There are no systematic patterns observed over the two surveys. While the increase in expenditure per household is more pronounced in central with about 10 percent increase, the northern region registered the lowest increase of around 1 percent. On the contrary, the western and eastern regions exhibited slight decreases of about 5 percent and 1 percent, respectively.

In addition, marked differences are observed within regions. Both the urban and rural areas of the northern and central region recorded significant increases, ranging from 2 percent to 15 percent. On the other hand, decreases in consumption per household are observed for both the rural and urban areas of the western and eastern region. It is also true that consumption declined by about 2 percent in Kampala.

**Table 6. 2.1: Monthly Consumption Expenditure Per Household**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
<b>Uganda</b>	109,400	266,300	134,100	113,300	266,100	139,300
<b>Central*</b>	138,700	221,000	150,900	151,500	249,000	165,900
<b>Kampala</b>	-	335,700	335,700	-	328,800	328,800
<b>Eastern</b>	104,400	201,600	113,900	103,900	184,000	112,100
<b>Northern</b>	65,000	132,200	68,800	65,300	152,400	69,800
<b>Western</b>	122,800	269,100	133,200	117,200	224,200	126,600

*Note \*Central excludes Kampala district*

### 6.2.2 Consumption Expenditure Per Capita

In nominal terms, we estimate mean consumption per capita in the 2002/03 survey to be 29,899 Uganda shillings per person per month. However excluding the four districts figure is 30,579. This latter number can be compared with our estimate of 27,173 Uganda Shillings for 1999/00. Note that the two surveys shared very similar consumption sections, with almost the same list of items

**Per capita expenditure has registered a real increase of 6 percent**

codes and identical recall periods<sup>4</sup>. There is thus a 12.5 percent nominal increase in consumption per capita between the surveys. This implies a modest real rise in consumption, since the Consumer Price Index (CPI) rose by 6.2 percent during the period<sup>5</sup>.

**Table 6.2.2: Monthly Nominal Mean Consumption Expenditure per Capita**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Whole sample	21,518	64,732	27,173	23,474	70,167	29,899
Sub-sample <sup>#</sup>	21,518	64,732	27,173	23,882	73,338	30,579

Notes: <sup>#</sup>Excludes Kasese, Kitgum, Gulu & Bundibugyo

On deflating the nominal expenditure by CPI, the results reveal that, on average, the per capita consumption expenditure increased from Shs. 25,700 in 1999/00 to Shs. 27,300 in 2002/03, representing a real increase of about 6 percent as presented in Table 6.2.3. The central region has the highest per capita expenditure increase from Shs. 30,400 to Shs. 32,500 (about 7 percent) real increase, western registered a marginal increase of 3 percent while northern remained constant. On the contrary, a real decline of 5 percent is observed for the eastern region.

On average, the urban areas recorded 7 percent real increase in per capita consumption expenditure while the rural areas recorded only a 5 percent increase. However, significant differences are observed within regions. Considering urban areas, the highest real increase is observed for central with 16 percent, followed by northern with 9 percent, eastern has remained constant while western registered a significant decline of about 19 percent. The picture is quite mixed for the rural areas across regions. The central, northern and western regions registered more or less the same percentage increases of 6, 7, and 5, respectively, while eastern recorded a decline of 5. Kampala district also exhibited a real increase of 11 percent per capita expenditure.

**Table 6.2. 3: Monthly Real Mean Per Capita Expenditure**

	1999/2000			2002/2003		
	Rural	Urban	Total	Rural	Urban	Total
Uganda	20,300	61,300	25,700	21,300	65,400	27,300
Central*	27,300	52,400	30,400	28,700	60,800	32,500
Kampala	-	79,500	79,500	-	88,100	88,100
Eastern	19,400	44,600	21,600	18,500	44,000	20,500
Northern	12,200	27,900	13000	13,000	30,400	13,800
Western	21,500	58,700	23,700	22,500	47,500	24,500

<sup>4</sup> The 2002/03 includes a few items not listed separately in 1999/00, but these changes are minor and mainly reflect new areas of consumption (e.g. mobile phones).

<sup>5</sup> 2002/03 covered the period from May 2002 to April 2003, during which time the composite CPI averaged 112.9 (1997/98=100). 1999/00 covered the period August 1999 to July 2000, during which time the CPI averaged 106.3.

**Adjustments for price effects when estimating poverty**

Although simply comparing nominal estimates of consumption with the CPI is useful to obtain a ball-park figure for real consumption, two further adjustments are made for price effects when estimating poverty as discussed in section 6.1. Specifically, home consumption on food is re-valued into market prices and regional differences in food prices are adjusted. The results are as presented in Table 6.2.4. In the case of the comparison of 1999/00 and 2002/03 survey results, both adjustments have the effect of lowering the estimated rate of real growth. After making these adjustments as well as those for inflation, real mean consumption per capita estimated from 2002/03 survey is 2.6 percent higher than the comparable figure estimated from 1999/00 survey. This rise implies an annualised growth rate of 0.9 percent. This growth rate represent a dramatic deceleration compared to the rates implied by the household surveys in the 1990s. A comparison of the IHS in 1992 with 1999/00 implies an annualised growth rate in real consumption per capita of 4.9 percent. Moreover, between the 1999/00 and 2002/03 surveys there has been effectively no average growth in living standards in rural areas, where the bulk of the population resides.

**Table 6. 2.4: Adjusted Comparison of Monthly Consumption Per Capita**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	urban	Total
Revaluing home consumed food at market prices	23,037	65,417	28,583	25,081	73,788	31,676
Adjusting for regional price variations	23,935	63,542	29,119	25,402	71,721	31,674
Adjusting for inflation (1997/98 prices)	22,622	60,203	27,540	22,646	63,999	28,245

**The surveys estimate slower growth than the national accounts**

Uganda National Household Survey (UNHS) estimates of private consumption can be compared with those from the national accounts. Although the national accounts are in part based on the findings of the household surveys, the 2002/03 results have not yet been used. Consequently, the national accounts provide an independent estimate of overall growth between 1999/00 and 2002/03 household surveys. Table 6.2.5 reports the constant price estimates for private consumption from the national accounts. In order to compare Table 6.2.5 with the findings of the surveys, the timing of the surveys must be considered. The 1999/00 survey ran from August 1999 to July 2000, close enough to be directly compared to FY99/00 (July to June). However, the 2002/03 survey ran from May 2002 to April 2003, falling half-way between a calendar and a fiscal year. In order to get an estimate from the national accounts for growth in the period between both surveys, it is most appropriate to compare real private consumption per capita in FY99/00 (Shs. 293,400) with the average of figures for calendar year 2002 and FY 2002/03 (Shs. 322,000). On this basis, the national accounts imply the figure for the period of 2002/03 survey is 9.7 percent higher than that for 1999/00 survey, equivalent to an

annualised growth rate of 3.4 percent. This growth rate recorded in the national accounts is higher than that estimated from the surveys. For example, if we take per capita consumption estimates in Table 6.2.3 (excluding four districts) we estimate an annualised growth rate of 2 percent. If we take the growth estimates from the surveys with full price adjustments (revaluing home consumption and using regional food price deflators), we obtain the 0.9 percent annualised growth estimate discussed earlier – a much lower figures than that implied by the National Accounts.

**Table 6.2.5: National Accounts Estimates of Real Private Consumption Per Capita**

		Private consumption (m Shs 1997/98 prices)	Population ('000s)	Private consumption per capita ('000 Shs)	Annualised growth rate
	1999	6,769,931	22,207	304.9	
1999/00		6,854,367	22,586	293.4	
	2000	7,078,158	22,972	308.1	1.1
2000/2001		7,268,410	23,364	311.1	6.0
	2001	7,438,063	23,763	313.0	1.6
2001/2002		7,676,429	24,168	317.6	2.1
	2002	7,901,791	24,581	321.5	2.7
2002/03		8,062,210	25,003	322.4	1.5

### 6.2.3 Share of Household Expenditure by Item Group

The above analysis is extended further to examine the trends in the share of each item group in the total household consumption expenditure including non-consumption expenditures prior to the presentation and discussion of the poverty estimates. The results are presented in Table 6.2.6. The share of food, drinks and tobacco in total household expenditure declined from 52 percent to 44 percent between 1999/00 and 2002/03. Despite this decline, its share remains the highest; followed by expenditure on rent, fuel and power at 19 percent. The decrease in the share of food, drink and tobacco is more pronounced in the rural area than in the urban area with 7 percent and 6 percent decrease, respectively. Worth noting is the observed increase of about 2 percent points in the share of rent, fuel, and power; and of about 3 percent points for transport and communication in overall total household expenditures.

**About 40 percent of the household expenditure goes on food**

**Table 6. 2.6: Share of Monthly Household Expenditure by Item Groups (%)**

Group Items	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Food, drink, and tobacco	56	38	52	49	32	44
Clothing and foot wear	4	5	4	4	5	4
Rent, fuel, and power	15	21	17	17	23	19
H/hd appliances & equip	6	7	6	7	7	7
Transport/communication	4	8	5	7	12	8
Education	5	9	6	6	9	7
Health	5	3	4	5	3	4
Other consumption	2	4	2	2	3	3
Non-consumption	3	5	4	3	6	4
Totals	100	100	100	100	100	100

**The northern region has the highest % expenditure on food**

The household expenditure on food, drink and tobacco takes the largest budget share in all regions compared to other item groups as presented in Table 6.2.7. The share of food, drink and tobacco is highest in Northern region with 56 percent, followed by eastern and western with 40 percent and 48 percent, respectively, while central has the lowest of 43 percent. Like at the national level, expenditure on food, drink and tobacco remains higher in rural in all the four regions.

Table 6.2.7 further reveals that expenditure on rent, fuel and power is next to expenditure on food, drink and tobacco followed by that on education. The central region has the highest expenditure on rent, fuel and power with 20 percent, this is followed by eastern and western with 17 percent each very close to northern with 16 percent. The expenditure on transport is also pronounced compared to other item groups. However, its share in the northern is very small (4 percent).

**Table 6.2. 7: Regional Monthly Expenditure by Item Groups (percent)**

	Central			Eastern			Northern			Western		
	R	U	T	R	U	T	R	U	T	R	U	T
Food, drink & tobacco	45	33	43	52	41	50	57	44	56	50	38	48
Clothing & foot wear	4	4	4	4	4	4	5	5	5	4	4	4
Rent, fuel & power	19	26	20	17	18	17	16	19	16	16	21	17
Household equipment	7	8	7	6	7	6	7	8	7	8	9	8
Transport & comm.	8	9	8	6	9	7	4	8	4	6	10	6
Education	7	11	8	6	10	7	4	7	4	7	9	7
Health	5	3	5	5	4	5	3	3	4	5	3	5
Other cons. Exp.	2	3	2	1	2	1	1	2	1	2	3	2
Non cons. Exp.	3	3	3	3	5	3	3	4	3	2	3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100

### 6.3 Poverty Trend Estimates

The absolute poverty line defined in Appleton (2001), obtained after applying the method of Ravallion and Bidani (1994) to data from the first Monitoring Survey has been used. This method focused on the cost of meeting calorie needs, given the food basket of the poorest half of the population and some allowance for non-food needs. It should be noted that there is a strong element of judgement and discretion when setting a poverty line. Consequently, too much attention should not be given to the numerical value of any single poverty statistic. Instead the interest is in comparisons of poverty estimates, whether overtime or across different groups. The poverty line was put into 1997/98 prices using the CPI and compared with the adjusted household consumption data discussed earlier.

Table 6.3.1 & 6.3.2 reports poverty statistics for the 2002/03 survey along with the earlier estimates for the 1992/93 (IHS), 1997 (MS-4) and 1999/00 surveys. It reports three poverty indicators: namely P0, P1 and P2 (see Foster, Greer and Thorbecke, 1984). The P0 indicator is "headcount": the percentage of individuals estimated to be living in households with real private consumption per adult equivalent below the poverty line for their region. Thus a P0 of 34 implies that 34 percent of Ugandans are estimated to live in households which spend less than what is necessary to provide their calorie requirements and a mark-up for non-food needs. The headcount shows how *broad* poverty is, although not necessarily how *deep*. That is to say, we do not know how far below the poverty line, the poor are. For this information we use the P1 or P2 indicators.

The P1 indicator is the "poverty gap". This is the sum over all individuals of the shortfall of their real private consumption per adult equivalent and the poverty line divided by the poverty line. One way to interpret the P1 indicator is that it gives the per capita cost of eradicating poverty, as a percentage of the poverty line, if money could be targeted perfectly. Thus if P1 is 10, then in an ideal world, it would cost 10 percent of the poverty line per Ugandan in order to eradicate poverty through selective transfers. In practice, it is impossible to target the poor perfectly and issues such as administrative costs and incentive effects have to be considered. The P1 measure gives an idea of the depth of poverty. However, it is limited because it is insensitive to how consumption is distributed between the poor. If money is transferred from the very poor to the marginally poor, we might expect this to show up as an increase in poverty but



it does not on the P1 measure. To satisfy this condition, we need the P2 measure.

The P2 indicator is the “squared poverty gap”. This is the sum over all individuals of the *square* of the shortfall of their real private consumption per adult equivalent and the poverty line divided by the poverty line. The reason to square the shortfall is to give greater weight to those who are living far below the line. It is hard to give a clear intuition about what a P2 indicator of say, 4.5, denotes. However, higher values of the indicator imply higher poverty.

Data are disaggregated by location, residence and regions . Along with the poverty statistics, the percentage of people in each location is reported, their mean household consumption per adult equivalent and the contribution each location makes to each poverty statistic (i.e. what percentage of national poverty is attributable to each location). Given that poverty statistics are estimates, it is useful to test whether changes in their values are statistically significant (Kakwani, 1990).

Using the full sample of 2002/03, we estimate that 39 percent of Ugandan are poor, corresponding to nearly 9.8 million persons (these figures exclude those in Pader district, which was not surveyed due to insecurity. Table 6.8 provides more detailed statistics, broken down by region and urban-rural status.

**Nearly 9.8 million  
Ugandans live in poverty  
in 2002/03**

**Table 6. 3.1: Poverty statistics for UNHS2002/03– full sample (excluding Pader district)**

Location	Pop. Share	Mean CPAE	P0	P1	P2	Contribution to		
						P0	P1	P2
National	100	35,736	38.8	11.9	5.10	100	100	100
Rural	86.2	29,508	42.7	13.1	5.66	94.9	95.5	95.7
Urban	13.8	74,772	14.4	3.9	1.59	5.1	4.5	4.3
Central	29.6	52,747	22.3	5.5	1.94	17.0	13.7	11.3
East	27.4	28,483	46.0	14.1	5.96	32.5	32.6	32.0
West	24.7	33,818	32.9	8.5	3.25	21.0	17.7	15.8
North	18.2	21,615	63.0	23.4	11.46	29.6	36.0	40.9
Central Rural	21.6	38,448	27.6	6.9	2.49	15.4	12.6	10.5
Central Urban	8.0	91,196	7.8	1.6	0.47	1.6	1.1	0.7
East Rural	25.3	26,245	48.3	14.9	6.28	31.5	31.7	31.1
East Urban	2.1	55,047	17.9	4.8	2.12	1.0	0.9	0.9
West Rural	22.6	31,511	34.3	8.9	3.39	19.9	16.9	15.0
West Urban	2.2	58,020	18.6	4.8	1.87	1.0	0.9	0.8
North Rural	16.8	20,234	65.0	24.3	11.88	28.1	34.3	39.1
North urban	1.4	37,623	38.9	13.9	6.56	1.5	1.7	1.9

To evaluate poverty trends, we can compare the results of the 2002/03 with those of UNHS 1999/00 and indeed estimates from earlier surveys in 1990s. However, the UNHS 1999/00 did not survey Kitgum, Gulu, Bundibugyo and

Kasese due to insurgency at the time of the survey. Consequently, for comparability, we exclude these districts from our subsequent statistics for the UNHS 2002/03 unless stated otherwise. The t-tests of the significance of the changes in the poverty statistics between 1999/00 and the 2002/03 have been reported in Table 6.3.3. Table 6.3.2 (a) shows that, excluding these four districts, the percentage of people who are poor in 2002/03 stands at 38%, corresponding to 8.9 million persons in poverty. This figure can be compared with the estimate from UNHS 1999/00 (see Table 6.8 (b)) that 34% were poor in 1999/00<sup>1</sup> (equivalent to 7.2 million persons in poverty, in absolute terms). This rise is statistically significant and also rises for the other poverty indicators (the so-called P1 and P2 measures). Thus our main finding is that, despite some very modest economic growth, poverty increased. This is in contrast to trends in the 1990s, where growth was stronger and appeared to be broadly shared. It should be noted, however, that the poverty rates remain below the 44 percent poor estimated from 1997 and the 56 percent estimated to be poor in 1992.

**Table 6.3.2: (a) Poverty Estimates in 2002/03 (excluding Kitgum, Gulu, Bundibugyo, Kasese and Pader districts)**

Sector	Pop. Share	Mean CPAE	P0	P1	P2	Contribution to		
						P0	P1	P2
National	100	36,433	37.7	11.3	4.82	100	100	100
Rural	86.5	29,952	41.7	12.6	5.40	95.6	96.4	96.8
Urban	13.5	77,815	12.2	3.0	1.15	4.4	3.6	3.2
Central	31.6	52,747	22.3	5.5	1.94	18.7	15.3	12.8
East	29.3	28,483	46.0	14.1	5.96	35.8	36.5	36.2
West	23.7	34,459	31.4	7.9	2.90	19.8	16.5	14.3
North	15.3	21,015	63.3	23.4	11.56	25.8	31.7	36.8
Central Rural	23.1	38,448	27.6	6.9	2.49	16.9	14.1	11.9
Central Urban	8.6	91,196	7.8	1.6	0.47	1.8	1.2	0.8
East Rural	27.0	26,245	48.3	14.9	6.28	34.7	35.5	35.2
East Urban	2.3	55,047	17.9	4.8	2.12	1.1	1.0	1.0
West Rural	21.8	32,234	32.7	8.2	3.00	18.9	15.7	13.6
West Urban	1.9	59,913	16.9	4.5	1.73	0.9	0.8	0.7
North Rural	14.6	19,955	65.0	24.2	11.95	25.1	31.1	36.1
North Urban	0.8	40,834	31.4	9.8	4.27	0.6	0.7	0.7

**Table 6.3.2: (b) Poverty in the 1999/00 (excludes Kitgum, Gulu, Bundibugyo, Kasese and Pader districts)**

Sector	Pop. Share	Mean CPAE	P0	P1	P2	Contribution to		
						P0	P1	P2
National	100	35,702	33.8	10.0	4.25	100	100	100
Rural	86.9	29,778	37.4	11.2	4.79	96.3	97.3	97.9
Urban	13.1	75,043	9.6	2.1	0.68	3.7	2.7	2.1
Central	28.9	50,270	19.7	4.4	1.47	16.9	12.8	10.0
East	26.6	31,869	35.0	9.3	3.61	27.5	24.8	22.6
West	25.4	34,408	26.2	6.1	2.07	19.7	15.6	12.4
North	19.0	20,637	63.7	24.6	12.31	35.9	46.9	55.1
Central Rural	20.6	36,453	25.2	5.8	1.95	15.4	11.9	9.4
Central Urban	8.4	84,266	6.1	1.0	0.28	1.5	0.8	0.6
East Rural	24.2	29,503	36.7	9.8	3.82	26.3	23.8	21.8
East Urban	2.4	56,141	17.1	4.2	1.40	1.2	1.0	0.8
West Rural	23.9	31,973	27.4	6.4	2.18	19.4	15.4	12.3
West Urban	1.5	73,915	5.7	1.0	0.27	0.2	0.2	0.1
North Rural	18.2	19,685	65.4	25.4	12.75	35.1	46.1	54.4
North Urban	0.9	40,181	28.6	8.2	3.18	0.7	0.7	0.7

**Table 6.3.2: (c) Poverty Rates in MS-4, 1997**

Sector	Pop. Share	Mean CPAE				Contribution to		
			P0	P1	P2	P0	P1	P2
National	100	28405	44.4	13.7	5.91	100	100	100
Rural	86.7	25063	48.7	15.2	6.56	95.0	95.8	96.3
Urban	13.3	50158	16.7	4.3	1.65	5.0	4.2	3.7
Central	30.0	38534	27.9	7.6	3.04	18.9	16.7	15.5
East	28.5	23698	54.3	18.3	8.20	34.9	38.0	39.6
West	24.9	25914	42.8	11.0	4.03	24.0	20.1	17.0
North	16.5	21895	59.8	21.0	10.00	22.2	25.2	27.9
Central Rural	21.3	31496	34.5	9.6	3.91	16.6	15.0	14.1
Central Urban	8.7	55820	11.8	2.7	0.91	2.3	1.7	1.3
East Rural	26.3	22281	56.8	19.2	8.67	33.6	36.8	38.6
East Urban	2.2	40282	25.2	7.1	2.74	1.3	1.2	1.0
West Rural	23.7	24957	44.0	11.4	4.15	23.5	19.7	16.7
West Urban	1.2	44269	19.7	4.6	1.57	0.5	0.4	0.3
North Rural	15.4	21055	61.8	21.7	10.36	21.4	24.3	26.9
North Urban	1.2	33076	34.0	11.0	5.19	0.9	0.9	1.0

**Table 6.3.2: (d) Poverty in the IHS, 1992**

Sector	Pop. Share	Mean CPAE				Contribution to		
			P0	P1	P2	P0	P1	P2
National	100	24262	55.7	20.3	9.90	100	100	100
Rural	87.6	21420	59.7	22.0	10.81	93.8	94.9	95.6
Urban	12.4	44334	27.8	8.3	3.48	6.2	5.1	4.4
Central	30.6	31172	45.6	15.3	7.04	25.1	23.1	21.8
East	27.9	21503	58.8	22.0	10.85	29.4	30.3	30.6
West	24.2	22679	53.1	18.7	9.01	23.0	22.3	22.0
North	17.3	18696	72.2	28.6	14.64	22.4	24.4	25.6
Central Rural	22.7	24128	54.3	18.7	8.76	22.1	20.8	20.1
Central Urban	8.0	51214	20.8	5.7	2.16	3.0	2.2	1.7
East Rural	25.4	20626	60.6	23.0	11.38	27.6	28.7	29.2
East Urban	2.5	30359	40.4	12.6	5.52	1.8	1.6	1.4
West Rural	23.1	21884	54.3	19.2	9.31	22.5	21.9	21.7
West Urban	1.1	39733	28.9	7.3	2.60	0.6	0.4	0.3
North Rural	16.5	18268	73.0	29.0	14.83	21.6	23.5	24.7
North Urban	0.8	26997	55.2	21.2	10.92	0.8	0.9	0.9

**Table 6. 3.3: T-test Statistics for Hypothesis of Equality of Poverty Statistics in 1999/00 and 2002/03**

	P0	P1	P2
National	5.70	5.08	3.83
Rural	4.96	4.29	3.16
Urban	3.20	4.03	4.22
Central	2.42	3.41	3.30
East	8.37	9.69	8.82
West	4.08	4.29	4.23
North	-0.21	-1.32	-1.31
Central Rural	1.63	2.50	2.54
Central Urban	1.57	2.37	2.00
East Rural	7.20	8.21	7.32
East Urban	0.42	1.00	2.29
West Rural	3.33	3.44	3.36
West Urban	6.73	7.08	6.45
North Rural	-0.18	-1.18	-1.18
North Urban	0.88	1.36	1.78

**The proportion of the poor population increased from 34 to 38 percent**

For the country as a whole, poverty increased between 1999/00 and 2000/2003 surveys whichever poverty indicator (P0, P1 or P2) is used. The percentage of the population living below the poverty line rose from 34 percent to 38 percent.

**Proportionate rise in poverty actually higher in urban areas than in rural areas**

Poverty increased in both urban and rural areas between 1999/00 and 2002/03 surveys. In rural areas, where it appears to have been no growth in consumption, the percentage of people in poverty rose from 37 percent to 42 percent, corresponding to 7.0 million to 8.5 million persons in poverty. In urban areas, the corresponding increase was from 10 percent to 12 percent, recording an increase in absolute numbers of poor from 0.3 million to 0.4 million. These increases were all statistically significant at the 1 percent level. Although rural areas remain markedly poorer than urban areas and saw lower growth in mean living standards, the proportionate rise in poverty is actually higher in urban areas. For example, the P1 indicator – which is related to the cost of eliminating urban poverty using transfers – increased by 12.5 percent in urban areas (from 2.1 to 3.0) whereas it rose by 8 percent in rural areas (from 11.2 to 12.6).

The increase in poverty between the surveys is most marked in the eastern region – where the headcount increases from 35 percent to 46 percent (that is, from 2.0 million to 3.2 million persons in poverty, respectively). In relative terms, this suggests 11 percentage points increase in the poverty headcount well above the economy-wide average of 4 percentage points. This increase seems to be driven by adverse trends in the rural areas from 37 percent to 48 percent. The proportion of people in poverty in Western region increases from 26 percent to 31 percent (that is, from 1.4 million to 1.8 million persons in poverty, respectively), a more modest rise but nonetheless statistically significant. The increase is driven by the urban areas, which experienced a 11 percentage points raise. In Central region, the rise in the headcount (P0) indicator from 20 percent to 22 percent is not statistically significant at conventional levels, but the increases in the other poverty indicators (P1 and P2) are significant. Only the northern region sees no rise in poverty, with a slight and insignificant fall in the headcount from 64 percent to 63 percent. In absolute numbers, the persons living in poverty declines from 2.6 million in 1999/00 to 2.3 million in 2002/03.

One unusual feature of these results is that poverty generally rises despite some, albeit very slow, overall economic growth. We have already seen that there was some increase in real consumption per capita between 1999/00 and

2002/03 surveys in Table 6.2.4. This is also evident from Table 6.3.2(a) and (b) which – along with the poverty indicators - shows the mean of welfare measure, real consumption per adult equivalent. For the country as a whole, the mean of this welfare measure increased from Shs 35,702 per month in 1999/00 survey to Shs 36,433 per month in 2002/03 survey; equivalent to an annualised growth rate of 0.7 percent. Some insight into how poverty could nonetheless rise is given by Table 6.3.4 which reports real consumption per adult equivalent at the median and other deciles. This table shows that while our welfare measure increased at the mean, it fell at the median from Shs 26,498 per month to 25,125. This fall is equivalent to an annualised fall of 1.9 percent. Falls in welfare between the surveys are also recorded for all other deciles, except the more affluent (the 8<sup>th</sup> and the 9<sup>th</sup> deciles, the lower bounds of the top 20 percent and top 10 percent most affluent Ugandans). Thus it appears that economic growth between 1999/00 and 2002/03 surveys affected mainly the most affluent 20 percent of Ugandans and was not felt by the majority of the country. These national trends do not appear to be driven by rural-urban differences – indeed, all deciles in urban areas appear to have experienced falling welfare levels.

**Table 6.3.4: Consumption Per Adult Equivalent per Decile (1997 Shillings)**

	<i>Decile</i>	<i>IHS</i>	<i>MS4</i>	<i>1999/00</i>	<i>2002/03</i>
<i>National:</i>	1	8,745	11,119	12,415	11,938
	2	11,376	14,036	16,246	15,363
	3	13,917	16,875	19,599	18,413
	4	16,410	19,603	22,751	21,675
	5	19,197	22,778	26,498	25,125
	6	22,484	26,041	30,662	29,359
	7	26,695	31,547	36,036	35,005
	8	32,289	37,928	44,369	44,911
	9	43,015	49,829	62,725	65,665
<i>Rural:</i>	1	8,413	10,763	11,836	11,405
	2	10,926	13,480	15,427	14,617
	3	13,280	15,942	18,523	17,460
	4	15,579	18,522	21,408	20,304
	5	18,226	21,154	24,534	23,312
	6	20,807	24,258	28,338	26,808
	7	24,528	27,859	32,419	31,383
	8	29,258	34,211	39,193	38,214
	9	37,106	42,640	50,462	53,082
<i>Urban</i>	1	14,425	18,186	22,772	21,054
	2	18,878	24,515	30,792	28,177
	3	23,614	30,135	35,873	34,746
	4	28,649	34,792	42,541	42,209
	5	33,486	40,114	52,069	49,765
	6	39,249	46,525	63,350	60,214
	7	47,204	55,541	79,197	72,028
	8	58,455	70,833	99,520	94,761
	9	77,373	96,251	147,383	146,709

**Income inequality increases from 0.39 to 0.43**

Table 6.3.5 reports the Gini coefficients as a measure of inequality in household consumption per adult equivalent. Between 1999/00 survey and 2002/03 survey, the Gini coefficient, and hence inequality, rises. This is a continuation of a trend of rising inequality first observed between MS-4 and 1999/00 survey. This reflects the fact that the lower deciles saw smaller rises in living standards than the more affluent. The increase in inequality occurred within both rural and urban areas, although it was most pronounced in the latter. The overall rise in inequality also reflects a widening rural-urban divide.

**Table 6.3.5: Gini Coefficients for Uganda**

	Rural	Urban	National
1992 HIS	0.326	0.395	0.364
1997/98 MS-4	0.311	0.347	0.347
1999/00	0.332	0.426	0.395
2001/2003	0.363	0.477	0.428

Since the distribution of income became more unequal between the 1999/00 and 2002/03 surveys, and growth was positive though low, it is not surprising that changes in distribution rather than growth explains all of the rise in poverty during the period. Consider, for example, the four point rise in the poverty headcount from 34 percent in 1999/00 to 38 percent in 2002/03. Applying the decomposition of Datt and Ravallion (1991), we find that the growth in mean consumption should have reduced the percentage living in poverty by 1.4 percentage points (i.e. assuming the distribution of consumption remained as in 1999/00). However, changes in the distribution of welfare were regressive, implying a 5.3 percent point rise in poverty (the Datt-Ravallion decomposition is not exact, but in this case, the residual is essentially zero).

Table 6.3.6 provides a disaggregation of poverty indicators for the 1999/00 and 2002/03 surveys based on the main industry in which the household head works<sup>6</sup>. Poverty rises markedly amongst crop farming households, with the headcount increasing from 39 percent to 50 percent. The socio-economic groups that have seen falls in poverty are mainly those households whose heads work in the government services, non-crop farming and those households whose heads are not working. Some observations do emerge on breaking sectors into geographical locations. Poverty worsened for trade and crop farming regardless of geographical location. The poor performance of the

<sup>6</sup> In previous poverty estimates, we have distinguished cash crop farming households (defined as those where the head's main industry is crop farming and the household grows coffee, cotton, tea or tobacco) from those

crop farming sub-sector is mainly driven by poverty increases in the eastern rural followed by the western rural. The eastern region recorded the highest rise of about 14 percent points for those working in the trade sub-sector. While declining poverty is observed for those working in the construction sub-sector residing in the northern and western regions, the central and eastern regions recorded increases in incidence of poverty. In addition, poverty falls drastically in the non-crop farming sub-sector in the northern region followed by the western region. The northern region followed by the eastern region is behind the observed fall in poverty in the government services and not working sub-sectors.

It should be noted that there are large changes in the share of the population in each socio-economic group. For example, the weighted proportion of the sample in crop farming households fell from 68 percent to 52 percent. In other words, fewer household heads reported their main activity as being crop farming reflecting movement of labor out of farming and into non-farm self-employment. Although such large putative population shifts may be implausible over a relatively short period, data from both surveys tend to suggest that the proportion of households with agricultural land remained constant between the two surveys. Thus the smaller number of households classified as crop farming seem not to be a consequence of changes in the sampling frame between the surveys.

**Table 6.3.6: (a) Poverty by Sector of Household Head, 2002/03**

Sector	Pop. Share	Mean CPAE	P0	P1	P2	Contribution to		
						P0	P1	P2
National	100	36,445	37.7	11.3	4.81	100	100	100
Crop agriculture	52.2	25,670	50.4	15.5	6.67	69.9	71.5	72.3
Non-crop agri.	5.4	39,160	33.6	9.8	4.11	4.9	4.7	4.7
Mining	0.2	36,440	26.2	4.4	1.17	0.2	0.1	0.1
Manufacturing	7.1	37,823	28.4	8.0	2.98	5.4	5.1	4.4
Public utilities	0.1	10,7111	11.5	0.2	0.01	0.0	0.0	0.0
Construction	1.8	43,032	22.6	4.6	1.50	1.1	0.7	0.6
Trade	14.2	48,328	17.3	4.3	1.56	6.5	5.4	4.6
Hotels	2.3	45,730	20.6	4.9	1.75	1.3	1.0	0.8
Transport/com.	2.6	54,635	18.3	3.7	0.96	1.3	0.9	0.5
Misc services	2.3	78,754	28.2	8.2	3.48	1.8	1.7	1.7
Gov. services	6.0	66,487	12.6	3.4	1.40	2.0	1.8	1.8
Not working	5.7	36,581	38.4	14.3	7.27	5.8	7.2	8.5

growing only food. However, the 2002/03 provides no information on crops grown, so for comparability we consider crop farming households as a whole.

**Table 6.3.6: (b) Poverty by Sector of Household Head, 1999/00**

Sector	Pop. Share	Mean CPAE	P0	P1	P2	Contribution to		
						P0	P1	P2
National	100	35,702	33.8	10.0	4.25	100	100	100
Crop Agriculture	67.6	28,768	39.0	11.3	4.68	78.0	76.7	74.4
Non-Crop Agri.	3.2	32,525	41.9	14.4	6.65	3.9	4.6	5.0
Mining	0.5	25,843	41.5	17.0	9.79	0.6	0.9	1.2
Manufacturing	3.0	43,539	23.3	5.2	1.75	2.0	1.5	1.2
Public Utilities	0.2	60,309	0.0	0.0	0.00	0.0	0.0	0.0
Construction	1.5	43,534	20.1	6.1	2.37	0.9	0.9	0.8
Trade	7.2	58,895	12.7	2.6	0.93	2.7	1.9	1.6
Hotels	1.0	55,102	11.6	2.4	0.69	0.4	0.3	0.2
Transport/Com.	2.2	55,368	13.8	2.6	0.71	0.9	0.6	0.4
Misc Services	3.1	67,902	18.2	6.4	3.33	1.7	2.0	2.5
Gov Services	5.5	56,830	15.4	3.9	1.52	2.5	2.2	2.0
Not Working	5.0	34,999	42.7	17.1	9.22	6.3	8.6	10.9

#### 6.4 Summary and Conclusions

The 2002/03 survey has shown an increase in per household and per capita expenditure. In addition, while food, drink and beverages still dominate the household budget share, a significant drop of 8 percent is observed over the same period. However, these changes have not been high enough to over turn the observed increases in poverty levels.

Data on private consumption from the 1999/00 and the 2002/03 surveys, imply slow growth between the surveys. The growth is in sharp contrast to the fast growth enjoyed in the 1990s and indeed lower than the growth recorded for recent years by the national accounts. However, whatever little growth between the two latest surveys, has not benefited the population. For the median Ugandan and most other deciles, living standards have fallen. As a result, poverty has increased although the proportion of the population living in poverty has remained below the estimates observed in 1997 and 1992. The worsening of poverty is particularly marked for some sub-groups of the population – including urban residents as a whole, crop farmers and those in Eastern region. Poverty has been stagnant in the Northern region and has fallen for some socio-economic groups, particularly those involved in government services and non-crop farming.



## CHAPTER SEVEN

### SELECTED WELFARE INDICATORS

#### 7.0 Introduction

Findings from Uganda Participatory Poverty Assessment Programme (UPPAP) report and the study on Poverty Correlates indicate that welfare indicators significantly affect the well being of the household.

This chapter discusses the indicators as measured by access to information (through radio and television), means of transport owned, sets of clothes for each member of household and a blanket for each child, levels of nutrition, access to local authorities, protection from crime and violence, and access and effectiveness of justice.

#### 7.1 Ownership of Clothes

**Close to 90 percent of households have all their members with at least two sets of clothes**

Possession of clothes is an indicator of welfare. Findings from the 2002/03 survey indicate that 88 percent of the households had all their members having at least two sets of clothes. This indicates a 3 percentage points decline in this indicator between 1999/00 and 2002/03 (See Table 7.1.1).

Overall, all regions reported declines in ownership of at least two sets of clothes except for Northern region. This is more pronounced in Eastern Region where it dropped by 10 percentage points. In the North, 74 percent of the households reported that each member had at least two sets of clothes, showing an improvement of 3 percentage points as compared to 1999/00 (See Table 7.1.2)

**Table 7.1.1: Indicators of Household Members' Welfare by Residence**

Indicator	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
Members have at least 2 sets of clothes	90	99	<b>91</b>	86	97	<b>88</b>
Children without a blanket	-	-	-	65	32	<b>60</b>
Households having a bicycle	44	22	<b>41</b>	47	20	<b>42</b>
Households having a motorcycle	-	-	-	2	3	<b>3</b>
Households having a vehicle	-	-	-	0.9	5.4	<b>1.7</b>
Households having a radio	48	78	<b>53</b>	60	76	<b>63</b>
Households having a television	-	-	-	3	24	<b>6</b>

## 7.2 Ownership of a Blanket

**Close to two-thirds of households have at least one child without a blanket**

Having a blanket is a basic necessity of life. The survey sought to know whether each member of the household under the age of 18 years had a blanket. Results show that 60 percent of households with children had at least one child without a blanket, with the percentage among rural dwellers (65 percent) twice as high as urban (32 percent) (See Table 7.1.1).

The variation across regions is also wide, with 82 percent of households in Northern as compared to 47 percent in Central who reported not having a blanket for at least one child. (See Table 7.2.1).

**Table 7.2.1: Indicators of Household Welfare by Region (%age)**

	C	E	N	W	K	T	C	E	N	W	K	T
At least two sets of clothes	97	93	71	96	98	91	95	83	74	91	99	88
Households without a blanket							47	76	82	49	19	60
Households having a bicycle	47	46	37	39	11	41	45	49	43	43	4	42
Households having a motorcycle	-	-	-	-	-	-	6.5	1.3	0.5	3.2	3.1	3
Households having a vehicle	-	-	-	-	-	-	1.7	1.1	0.3	1.7	6.8	1.7
Households having a radio	66	46	26	58	84	53	75	56	37	73	79	63
Households having television	-	-	-	-	-	-	11	3	0.26	2	37	6

## 7.3 Ownership of Means of Transport

**Close to one in every two households own a bicycle**

Having access to means of transport increases household incomes through enabling access to markets for their products, thus improving prices received. The means are categorized into bicycle, motorcycle and motor vehicle.

**Ownership of bicycles is higher in the rural areas, but similar across regions**

Findings show that 42 percent of the households own a bicycle, which is almost similar to what was reported in 1999/00. There are significant variations by residence. The households in rural areas who own a bicycle (47 percent) is twice as high as those in urban areas (20 percent) as shown in Table 7.1.1. The percentage of the households owning a bicycle is, however, about the same across regions (See Table 7.2.1).

**Ownership of motorcycles higher in central and lower in northern region**

Only three percent of the households own a motorcycle and it is similar across residence. Differences across regions are however, great with central better off in this indicator by about 12 times the Northern figure. (See Table 7.2.1).

About 2 percent of the households own a motor vehicle. There is, however, a large variation across locations with 5 percent in urban areas as compared to about 1 percent in the rural areas.

#### **7.4 Access to Information**

Access to information is also an indicator of welfare. The survey inquired into the different ways through which people access information. These are categorized into radio and a television set.

**About two in three households own a radio**

Results show that 63 percent of the households own a radio. This depicts a general improvement of 10 percentage points as compared to 1999/00. However, the improvement is more pronounced among rural dwellers from 48 percent in 1999/00, to 60 percent in 2002/03, and a slight decline in urban areas from 78 percent in 1999/00 to 76 percent in 2002/03 (See Table 7.1.1).

Overall, six percent of the households own a television. The disparity is, however, so large across residences, with 24 percent owning a set in urban as compared to just 3 percent in rural areas (See Table 7.1.1). Comparing regions, 11 percent in central owned television sets while less than 1 percent in northern owned the same. (See Table 7.2.1).

## 7.5 Salt

**Two in every three households bought salt when it got used up**

The survey sought to know what households did when they last ran out of salt. Sixty-six percent of the households bought it when it got finished. This is an improvement of 6 percentage points as compared to the 1999/00 survey findings.

**Less than 10 percent of households did without salt**

The proportion that bought salt when it got finished is 84 percent in urban areas compared to 62 percent in rural areas. There is, however, a regional disparity with 81 percent of the households in central region buying salt when it gets finished as compared to 44 percent in northern region. Less than 10 percent did without salt in both 1999/00 and 2002/03 periods. This information is depicted in Table 7.5.1.

**Table 7.5.1: Reaction of the Households when they Ran Out of Salt (%age)**

	<u>1999/00</u>			<u>2002/03</u>		
	Borrowed from neighbour	Bought	Did without	Borrowed from neighbour	Bought	Did without
<b>Residence</b>						
Rural	37	56	6	32	62	4
Urban	16	81	2	14	84	1
<b>Region</b>						
Central	22	72	4	15	81	2
Eastern	45	50	3	41	54	3
Northern	43	38	18	46	44	8
Western	30	68	1	23	72	3
Kampala	14	84	1	6	92	1
<b>TOTAL</b>	<b>33</b>	<b>60</b>	<b>5</b>	<b>30</b>	<b>66</b>	<b>4</b>

## 7.6 Levels of Nutrition

**One-in-two households ate meat or fish at least twice during the week preceding the survey**

Feeding habits determine people's physical performance. Households were asked whether they ate meat or fish in the week preceding the survey. Findings show that about one in two households reported consuming meat or fish at least twice in a week preceding the survey. There has been, however, a general improvement with 28 percent never taking meat or fish as compared to 35 percent in 1999/00. Almost all households reported taking at least 2 meals per day. Results further reveal that there are no major residence differentials among those that eat one meal (See Table 7.6.1).

**Table 7.6.1: Feeding Habits of Household Members (%age)**

	1999/00			2002/03		
	Rural	Urban	Total	Rural	Urban	Total
<b>Ate meat or fish twice</b>						
Not at all	38	18	<b>35</b>	31	15	<b>28</b>
Once	24	15	<b>22</b>	25	17	<b>24</b>
Twice	18	24	<b>19</b>	22	27	<b>23</b>
More than twice	20	43	<b>24</b>	22	41	<b>25</b>
<b>Average number of meals</b>						
One meal per day	-	-	-	8	6	<b>7</b>
Average of 2 meals per day	-	-	-	62	52	<b>60</b>
More than 2 meals per day	-	-	-	30	42	<b>33</b>

### 7.7 Breakfast for Children Aged 0-4 years

The survey also asked about the type of breakfast that was given to children below 5 years of age. The foods and drinks given determine early child growth.

Thirteen percent of households gave their children milk tea with sugar. There is, however, a great variation across regions, with 21 percent of the households in central region as compared to just 3 percent in the northern region. This means that a bigger percentage misses out on the nutritional values of milk.

It is worth noting that 17 percent went without breakfast, with Eastern and Northern regions superceding Central by more than 3 times.

**Table 7.7.1 : Breakfast for children Aged 0-4 years (%age)**

	2002/03					Total
	Central	Eastern	Northern	Western	Kampala	
Tea drink (with or without sugar) and solid food	42	27	27	18	38	<b>30</b>
Milk tea with sugar	21	10	3	13	34	<b>13</b>
Porridge (with or without sugar) and solid food	9	17	10	29	5	<b>18</b>
Porridge with milk	6	1	0	8	10	<b>5</b>
Other foods (left-overs)	11	16	32	12	5	<b>17</b>
Nothing	7	23	21	15	3	<b>17</b>

**Only 3 percent of households in the north gave milk tea to the children aged 0 – 4 years**

## 7.8 Safety from Crime and Violence

Half of the households are generally safe from crime and violence

Being safe from crime and violence restores people's confidence and concentration, and thus increases output. The survey sought to find out how safe households were. Findings indicate that half of the households were generally safe from crime and violence (See Table 7.8.1).

**Table 7.8.1: Safety of Household Members from Crime and Violence**

Response	1999/00 by Region				2002/03 by Residence			Total
	Central	Eastern	Northern	Western Kampala	Rural	Urban		
	Percent							
Very unsafe	7	6	18	5	6	9	7	8
Neither safe nor unsafe	11	16	18	12	22	15	17	16
Generally safe	55	50	42	53	54	51	53	52
Very safe	20	23	12	26	11	21	17	20
Don't know	5	2	7	1	5	4	4	4

## 7.9 Delivery of Justice

Close to two thirds of households are in a distance less than 10 Km from the Magistrates' Court

Access and effectiveness of the legal system protects the citizens from manipulation and corruption. The survey inquired into how far it is to the nearest Magistrates Court and the time taken to obtain a hearing. Results show that close to two-thirds of households were in a distance less than 10 kilometers. This is good because people do not have to move long distances to seek legal services. Results further show that one in every three respondents reported that it took less than one month to obtain a hearing at the nearest Magistrates Court.

**Table 7.9.1: Delivery of Justice**

	Region					Residence			Total
	Central	Eastern	Northern	Western	Kampala	Rural	Urban		
	Percent								
	<b>Distance to a Magistrates court</b>								
Less than 5 km	24	25	20	24	70	17	73	27	
5 – 10 km	31	36	30	34	25	35	20	32	
10-20 Km	19	25	22	20	2	24	3	20	
More than 20	26	14	28	22	3	24	4	21	
	<b>Time taken to obtain a hearing</b>								
Less than 1 month	39	49	34	24	45	35	45	37	
2 – 5 months	13	20	21	29	21	22	19	21	
6 – 12 months	5	7	15	22	2	13	6	12	
More than 1 year	43	24	30	25	32	30	30	30	

#### **7.10 Summary of Findings**

There has been a general downward trend in the indicators between 1999/00 and 2002/03 periods. Whereas ownership of clothes has declined between the 1999/00 and 2002/03 periods, ownership of bicycles and radios has improved over the same period. One in every 5 children aged 0 – 5 years, in the eastern and northern regions does not eat breakfast.

## **CHAPTER EIGHT**

### **INFORMAL SECTOR**

---

#### **8.0 Introduction**

Government together with development partners has promoted the informal sector through a wide range of strategies because of its importance to the economy. The informal sector is becoming an increasingly important component of the national economy. The last informal sector survey was carried out during the 1993-94 First Monitoring survey (FMS), having been carried out also during the 1992/93 Integrated Household Survey. Informal sector comprises of small-scale businesses, usually with self-employed activities, with or without hired labour. They operate with low level of organization, low capital, low technology and often on temporary premises. Usually, they are not supported by formal financing institutions, and are not usually registered in government.

A household enterprise is an economic unit owned by the household but without an identifiable location. On the other hand, an establishment is a business activity carried out with an identifiable fixed location and address. Establishments having less than 5 paid employees irrespective of the number of working proprietors or unpaid family helpers were considered as small scale. The survey covered small-scale establishments located in the sampled rural enumeration areas only.

All establishments in a selected enumeration area were listed and a sample of 10 was drawn by proportionally allocating them in 5 categories of the questionnaires. If the listed establishments were 10 or less, then all of them were interviewed. Since 2002/03 household survey covered only rural establishments, the data has to be merged with that of the 2002/2003 Business Inquiry who covered the urban establishments.

This report covers the informal sector comprising of household-based enterprises only. All the information in this chapter relates to non-crop farming household enterprises both rural and urban.

#### **8.1 Households Operating Enterprises**

The survey revealed that the total number of households operating a household enterprise was estimated to be about 1.8 million. This constituted about 36 percent of the total number of households (see table 8.1.1). However, it should be noted that a household may at times have more than one enterprise.

**1.8 million households  
operate a household  
enterprise**



**Urban areas has a small percentage of households with enterprises**

Household enterprises are twice as common in the rural areas. Almost 40 percent of the rural households have enterprises compared to only about 20 percent in the urban areas. Table 8.1.1 further reveals that compared with the 1993/94 First Monitoring Survey (FMS), there has been a slight increase of about 3 percentage points of the proportion of households with enterprises. The increase is slightly higher in urban areas (4.1 percentage points) compared to rural households (3.1 percentage points).

The household enterprises between the two periods increased from 1.2 million to 1.8 million giving an increase of 29.6 percent. However, the proportion increase is more pronounced in the urban areas (46 percent) compared to rural areas (28 percent).

**Table 8.1.1: Number of Households Operating Enterprises**

Residence	Estimated hhs ('000)		Hhs with non crop enterprises		Proportion	
	1993/94	2002/03	1993/94	2002/03	1993/94	2002/03
Rural	3,208	4,095	1,152	1,596	35.9	39.0
Urban	563	844	90	167	15.9	19.8
<b>Total</b>	<b>3,771,</b>	<b>4,938</b>	<b>1,241</b>	<b>1,763</b>	<b>32.9</b>	<b>35.7</b>

The percentage increase of household enterprises between the two survey periods is slightly higher (29.6 percent) than the increase in the estimated number of households (23.6 percent).

## 8.2 Household Enterprises by Region

**Eastern and central regions had the largest number of enterprises**

As revealed in Table 8.2.1, Eastern and Central regions have the highest proportion of household enterprises (32 percent) while western region has the least (11 percent). The trend is similar to that observed in the 1993-94 First Monitoring survey.

The table further reveals that compared to the 1993-94 FMS, the increase in the number of household enterprises has been more pronounced in the central region where it almost doubled and least in the northern region (5 percent).

**Table 8.2.1: Number of Household Enterprises by Region**

Region	1993/94		2002/03		Change
	Number ('000)	%	Number ('000)	%	%
Central	283	22.8	562	31.8	98.2
East	356	28.7	566	32.1	59.0
North	418	33.7	437	24.8	4.5
West	184	14.8	198	11.3	7.6
<b>Total</b>	<b>1,241</b>	<b>100</b>	<b>1,763</b>	<b>100</b>	<b>42.0</b>

### 8.3 Number of Household Enterprises by Industry

**Most household enterprises are in mining, quarrying and manufacturing**

Of the household enterprises covered, 41 percent were in mining, quarrying, and manufacturing industry, followed by 36 percent in the trade and services industry. These two categories constitute more than three quarters of the household based enterprises as shown in Table 8.3.1. The Forestry industry, and the hotels, lodges, bars, restaurants and eating places industries have the least number of household enterprises (about 5 percent each).

**Table 8.3.1: Number of Household Enterprises by Residence**

Industry of enterprise	Rural		Urban		Uganda	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Mining, quarrying, and manufacturing	660	41.4	63	37.9	723	41.0
Trade and services	540	33.8	88	52.5	627	35.6
Livestock, poultry, bee-keeping, and fishing	229	14.3	9	5.2	237	13.5
Hotels, lodges, bars, restaurants, and eating places	82	5.1	6	4.0	88	5.0
Forestry	85	5.3	1	0.5	86	4.9
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

In urban areas, slightly over 50 percent of the household enterprises in urban areas are in trade and services compared to about one third in the rural areas. On the other hand, more households in rural areas are more likely to engage in mining, quarrying and manufacturing industry than the urban counterparts.

### 8.4 Number of Persons Engaged

Respondents during the survey were requested to provide the number of persons employed (including working proprietors and unpaid family helpers). The 2002 Population and Housing Census Provisional Results gave the population of Uganda as 24.7 million persons. The total number of persons

engaged in non crop household enterprises was estimated at 2.5 million, making approximately 10 percent of the total population.

**Table 8.4.1: Total Persons Engaged in Enterprises by Sector**

Industry	Employment status							
	Working proprietor	%	Paid employees	%	Unpaid helpers	%	All employment categories	%
Livestock, poultry, bee-keeping, and fishing	233	13.1	70	29.3	218	38.7	521	20.2
Forestry	87	4.9	3	1.4	27	4.7	117	4.5
Mining, quarrying, and manufacturing	740	41.5	105	43.8	196	34.7	1,040	40.3
Hotels, lodges, bars, restaurants, and eating places	88	4.9	6	2.6	27	4.9	121	4.7
Trade and services	634	36.6	55	22.9	96	17.0	784	30.3
<b>Total</b>	<b>1,782</b>	<b>100</b>	<b>238</b>	<b>100</b>	<b>563</b>	<b>100</b>	<b>2,583</b>	<b>100</b>

The majority of the persons engaged in household enterprises are in mining, quarrying, and manufacturing industry (40 percent) and the lowest number is in forestry industry (5 percent) as shown in Table 8.4.1.

**More unpaid family helpers in livestock and fishing industry**

There are more unpaid family helpers in the livestock, poultry, bee-keeping, and fishing industry (38.7 percent) followed by Mining, quarrying, and manufacturing industry (34.7 percent). However, there are more paid employees in the mining, quarrying, and manufacturing industry (44 percent) and the least are found in forestry activities (1 percent).

### 8.5 Total Persons Engaged by Activity Status

**Household enterprises engage very few paid workers**

Majority of the persons engaged in the household enterprises are working proprietors (69 percent) and the least are paid regular employees (3 percent) as shown in Table 8.5.1 below. There is also a sizeable proportion of about 22 percent of unpaid family helpers in household enterprises. This implies that most of these household enterprises mostly rely on family members or kinship for labour. The paid employees contributed less than 10 percent to the total persons engaged in the household enterprises.

**Table 8.5.1: Persons Engaged by Activity Status**

Activity status	Persons Engaged	
	Number ('000)	%
Working proprietor	1,782	69.0
Paid regular employee	73	2.8
Paid casual workers	166	6.4
Unpaid helpers	563	21.8
<b>Total</b>	<b>2,583</b>	<b>100</b>

### 8.6 Persons Engaged by Sex

Table 8.6.1 shows that there are more males engaged in non-crop farming household enterprises (61 percent) compared to females (39 percent). However, the difference is more pronounced among paid workers (92 percent) compared to unpaid family helpers (54 percent).

**Table 8.6.1: Persons Engaged by Sex**

Activity status	Male		Female		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Working proprietor	1,058	59.4	724	40.6	1,782	100
Paid regular employee	64	87.7	9	12.3	73	100
Paid casual workers	152	91.6	13	7.8	166	100
Unpaid helpers	304	54.0	260	46.2	563	100
<b>Total</b>	<b>1,578</b>	<b>61.1</b>	<b>1,005</b>	<b>38.9</b>	<b>2,583</b>	<b>100</b>

### 8.7 Paid Employees

The paid employees in the surveyed household enterprises include both the regular and casual. The survey results indicate that the majority of paid employees in household enterprises were engaged in mining, quarrying, and manufacturing industry (44 percent), followed by those in livestock, poultry, bee-keeping and fishing (29 percent). The least number of paid employees are in the forestry industry (less than 1 percent).

Majority of the males are employed in the mining, quarrying and manufacturing industry (43 percent). However, more than one half of all the female paid employees (62 percent) were in the same industry as males.

**Table 8.7.1: Paid Employees by Gender and Industry**

Activity status	Male		Female		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Mining, quarrying, and manufacturing	97	43.3	8	62.3	105	44.3
Livestock, poultry, bee-keeping, and fishing	66	29.6	4	29.3	70	29.2
Trade and services	54	24.3	0*	2.7	55	23.1
Hotels, lodges, bars, restaurants, and eating places	6	2.6	1	5.7	6	2.7
Forestry	1	0.3	0*	0.0*	1	0.3
<b>Total</b>	<b>224</b>	<b>100</b>	<b>13</b>	<b>100</b>	<b>237</b>	<b>100</b>

\* Rounds off to zero

### 8.8 Ownership of Enterprise

**Most enterprises are solely owned**

A question was asked on the type of ownership of the household enterprise being investigated. Most of the household enterprises are wholly owned by one person who has total responsibility for all operations including risk-taking of the business. Table 8.8.1 shows that 97 percent of the household enterprises are managed and owned by sole proprietors and 3 percent of the household enterprises are owned in partnership.

**Table 8.8.1: Ownership of Enterprises by Residence**

Ownership	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Sole proprietor	1,539	96.5	163	96.6	1,702	96.5
Partnership	53	3.3	4	2.7	57	3.3
Others	2	0.0	-		1	0.0
Not stated	2	0.2	1	0.7	3	0.2
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

### 8.9 Acquisition of Enterprise

Respondents owning household based enterprises were asked to establish in which way they acquired the enterprises.

**Almost all enterprises were started by the proprietors**

The findings show that the majority of the household enterprises are started by the proprietors themselves (95 percent) compared to those that are either inherited or received as gifts (2 percent). About 1 percent was bought. A similar

pattern exists by residence though slightly more household enterprises were inherited in the rural than in urban areas.

**Table 8.9.1: How the Business was Acquired**

Acquisition	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Started by proprietor	1,506	94.3	160	96.1	1,666	94.5
Inherited	38	2.4	2	1.0	40	2.2
Bought	18	1.1	2	1.0	20	1.1
Received as gift	28	1.8	2	0.9	30	1.7
Others	6	0.4	0	0.2	6	0.3
Not stated	0	0.0	1	0.8	2	0.2
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

### 8.10 Duration of Business

In addition to other background characteristics, information was collected about the year in which the business was started.

The results reveal that almost half of the household enterprises were started less than 5 years from the date of the survey. About 55 percent of the urban household enterprises were started less than 5 years ago. This shows that urban household businesses were set up more recently than the rural ones. This may partly be attributed to rural-urban migration whereby the influx of people who move to urban areas for better facilities is greater than in rural settings.

About 17 percent of the enterprises have been in existence for a period of over 15 years though the proportion is lower in urban areas.

**Table 8.10.1: Duration of Businesses**

Duration (years)	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Less than 5	739	46.3	92	55.1	831	47.1
5 - 9	359	22.5	37	22.2	396	22.5
10 - 14	175	10.9	16	9.6	191	10.8
15+	284	17.8	21	12.6	305	17.3
Not stated	39	2.4	1	0.6	40	2.3
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

**Almost half of the enterprises were started less than 5 years ago**

### 8.11 Duration in Months when Business was Operational

Given that some businesses could be seasonal, information was sought on the duration in months during the last 12 months for which the business was fully operational.

**Most enterprises are not seasonal**

Table 8.11.1 reveals that almost three-quarters of the household enterprises operated 8 months or more during the last 12 months prior to the date of survey. This implies that most of the household enterprises are not seasonal, as is the case of crop farming enterprises. The trend is similar between residence. Less than 10 percent of the surveyed establishments had operated for less than 4 months during the last 12 months.

**Table 8.11.1: Duration of Business being Operational**

Duration (months)	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Less than 4	154	9.6	16	9.8	170	9.6
4 to- less than 8	291	18.2	26	15.8	317	18.0
8 to 12 months	1,152	72.2	124	74.4	1,276	72.4
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

### 8.12 Main Source of Finance

The survey also collected information on the source of initial capital for establishing the enterprises. An analysis of source of finance for household enterprise businesses gives us a clue to what extent household enterprises acquire or access financial institutions.

**Own savings are major source of capital**

Table 8.12.1 indicates that own savings are the major source of capital for starting the enterprises (92 percent). Loans in the table refer to loans from friends, relatives, money lenders, banks, or financial institutions. Only 6 percent of the household based enterprises received loans for start-up capital for their businesses. Urban households are slightly more likely to obtain loans to finance their businesses (8 percent) than their rural counterparts (5 percent). Lack of collateral may be the reason why household enterprise operators find it difficult to obtain loans from these financial institutions.

**Table 8.12.1: Major Source of Finance**

Source	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Own savings	1,479	92.7	150	89.7	1,629	92.4
Loan	84	5.3	14	8.4	98	5.6
Others	27	1.7	1	0.6	28	1.6
Not stated	6	0.4	2	1.2	8	0.5
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

### 8.13 Collateral Required for the Loan

Household based businesses that indicated that they mainly finance their investments through acquisition of loans, were further asked if security was required as a condition for acquisition of the loan.

The results show that land is the most common type of security that households offer in order to secure the loan to finance their businesses (81 percent) followed by the house (12 percent). Cattle are not so important as a means of security to obtain a loan for financing their enterprises. The proportion that offered land is lower in urban areas (67 percent) than in rural areas (84 percent). There are twice as many households that use houses as security to obtain a loan for financing the businesses in urban areas (22 percent) than in rural areas (10 percent).

**Table 8.13.1: Security Required for the Loan**

Type of security	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Land	70	83.6	10	67.3	79	81.2
Cattle	5	6.3	1	10.5	7	6.9
House	8	10.1	3	22.2	12	11.9
<b>Total</b>	<b>83</b>	<b>100</b>	<b>14</b>	<b>100</b>	<b>98</b>	<b>100</b>

### 8.14 Market for the Products

Household members operating household enterprises provided information concerning the type of markets for their products.

The survey reveals that almost three-quarters of the businesses sell their products to local consumers or passers-by followed by those who sell to local traders (13 percent). The trend is almost similar between residence although

**Land is overwhelmingly the most common type of security for loans**

**Small proportion of households sell their products in shops or markets**



urban dwellers are more likely to sell to local consumers/passers'-by than their rural counterparts.

However, there is a big variation between various sectors. Over 90 percent of eating places/drinking places sell their products to local consumers/passers'-by whereas a sizeable proportion of mining, quarrying and manufacturing industry enterprises sell their products to local traders. The proportion of households that sell their output in shops or markets is only 10 percent.

**Table 8.14.1: Market for Products**

Type of market	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Local consumers/passers-by	1,150	72.1	129	77.8	1,280	72.6
Market/shop	168	10.6	11	7.2	180	10.2
Local traders	214	13.4	20	13.2	236	13.4
Others	56	3.5	2	1.2	58	3.3
Not stated	8	0.5	1	0.6	7	0.5
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

### 8.15 Problems Encountered in Establishing the Business

Information regarding problems faced by small-scale businesses in the day to day management and their expansion is very vital for key stakeholders and promoters of small scale businesses.

**Lack of start-up capital is the commonest problem for starting up enterprises**

More than half of the household enterprises reported start-up capital as their major problem (52 percent). The problem of start-up capital is more pronounced in urban areas than in rural areas. This is followed by clients/markets (11 percent). The pattern is the same between residence. However, about 14 percent of the surveyed household enterprises did not encounter any problem when starting their businesses.

**Table 8.15.1: Major Problems in Setting up Enterprise**

Problem	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
None	223	14.0	18	10.8	241	13.7
Start-up capital	819	51.3	96	57.5	915	51.9
Obtaining skills	111	7.0	11	6.6	122	6.9
Accessing raw materials	131	8.2	7	4.2	138	7.8
Finding clients/ markets	175	11.0	26	15.6	201	11.4
Gov't regulations	27	1.7	2	1.2	29	1.6
Water, elect., transp.	28	1.8	1	0.6	29	1.6
Others	51	3.2	4	2.4	55	3.1
Not stated*	31	1.9	2	1.2	33	1.9
<b>Total</b>	<b>1,596</b>	<b>100</b>	<b>167</b>	<b>100</b>	<b>1,763</b>	<b>100</b>

*NB: Some people faced problems but did not state what they were.*

### 8.16 Turnover in Relation to a Year Ago

The survey collected information from household enterprises concerning comparing the turnover with similar months in the previous year. This was to cater for seasonal enterprises.

#### Majority had low turnover

Of the household enterprises interviewed, an estimate of about 158,000 households or 9 percent had either started less than a year ago as per the date of survey or did not state the rate of turnover that month compared to similar months during the last 12 months. Of the total households that responded to this question, 19 percent stated the rate of turnover as low. The proportion was slightly higher in rural households (20 percent) compared to their urban counterparts (15 percent).

**Table 8.16.1: Rating of Turnover**

Rating	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
High	288	19.8	22	15.1	310	19.3
Normal	534	36.6	57	39.0	592	36.9
Low	636	43.6	67	45.9	703	43.8
<b>Total</b>	<b>1,458</b>	<b>100</b>	<b>146</b>	<b>100</b>	<b>1,605</b>	<b>100</b>

About 37 percent of the households reported the rate of turnover as normal compared to similar months during the past one year while 44 percent stated

the rate of turnover as low. The trend in both categories is almost the same across residence.

### 8.17 Performance of Activity Compared to a Year Ago

During the survey, a question was asked to compare the performance of the activity in relation to a year ago for enterprises that had operated for at least one year.

Of the total number of household enterprises surveyed, about 14 percent of the enterprises either operated for less than one year or did not state the performance of the business. Table 8.17.1 shows that 27 percent of the household enterprises reported that the businesses were growing. The proportion is similar across residence. The proportion that reported that the businesses were either the same or declining compared to a year ago as of the date of interview were almost similar (at about 35 percent).

**Table 8.17.1: Performance of Activity**

Comparison	Rural		Urban		Total	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Growing	378	27.6	34	25.0	413	27.3
The same	509	37.1	44	33.0	554	36.8
Declining	485	35.3	57	42.0	543	35.9
<b>Total</b>	<b>1,374</b>	<b>100</b>	<b>135</b>	<b>100</b>	<b>1,509</b>	<b>100</b>

### 8.18 Gross Output and Value Added

#### 8.18.1 Gross Output

One of the objectives of the informal sector survey is to measure gross output, though the estimate of the number of persons engaged is also another major objective. The survey collected information to calculate gross output, which in other words is the total value of sales of goods and services sold out of the household enterprise. It includes the total gross sales of products, sale of goods and materials in the same condition as purchased, and services rendered to others.

From the survey results, the gross output during the last 30 days preceding the date of survey from household enterprises was estimated at Shs. 175.6 billion. The livestock, poultry, bee-keeping, and fishing industry group contributed the highest proportion of gross output of 37 percent. The mining, quarrying, and

**About a quarter had declining performance of businesses**

**Manufacturing contributes highest proportion of gross output**

manufacturing broad industry group contributed 27 percent to the total gross output followed by trade and services broad industry contributing 24 percent. The forestry industry contributed the least proportion of gross output of 6 percent.

### 8.18.2 Value added

Value added has been computed as the gross output less the value of intermediate inputs. The intermediate inputs include none labour inputs such as raw materials for manufacturing enterprises, rent, transport, veterinary services, animal and chicken feeds, electricity, postage and communication, etc.

The total value added from the survey was estimated at Shs. 110 billion, the biggest contribution being the livestock, poultry, bee-keeping, and fishing broad industry (49 percent). It was followed by the mining, quarrying, and manufacturing industry (21 percent), and the least was Hotels restaurants, eating places with 3 percent.

**Livestock with highest proportion of value added**

**Table 8.18.1: Gross output and value added by industry (Million Shs.)**

Industry	Gross output		Value added	
	Value	%	Value	%
Livestock, poultry, bee-keeping, and fishing	64,631	36.8	53,834	48.9
Forestry	10,214	5.8	9,907	9.0
Mining, quarrying, and manufacturing	46,650	26.6	22,545	20.5
Hotels, lodges, bars, restaurants, and eating places	12,938	7.4	2,828	2.6
Trade and services	41,240	23.5	20,907	19.0
<b>Total</b>	<b>175,673</b>	<b>100</b>	<b>110,021</b>	<b>100</b>

### 8.19 Gross Output and Value Added by background characteristics

The results in Table 8.19.1 indicate the total contribution to the total value of gross output from rural household enterprises, was 87 percent. The contribution was higher for the value added whereby rural enterprises contributed 91 percent to total value added. Central region's estimate of gross output is the highest compared to other regions (38 percent), followed by western region (26 percent). The northern region had the least contribution to the gross output estimate of 17 percent. The contributions of regions to value added was highest in central region (38 percent) and least in the eastern region (13 region).

**Central region with highest proportion of gross output**

**Table 8.19.1: Gross output and value added by regions (Million Shs.)**

Industry	Gross output		Value added	
	Value	%	Value	%
<b>Total</b>	175,673	100	110,021	100
<b>Residence</b>				
Rural	152,288	86.7	101,054	91.4
Urban	23,385	13.3	8,697	8.6
<b>Region</b>				
Central	67,524	38.4	41,245	37.5
East	33,893	19.3	14,565	13.2
North	29,305	16.7	20,648	18.8
West	44,950	25.6	33,560	30.5

### 8.20 Gross output by industry and regions

The survey reveals that there are variations in contribution to the gross output value between regions and industry groups. For the livestock, poultry, bee-keeping, and fishing industry, the western region contributed 52 percent to the total gross output estimate compared to 40 percent for the central region. The contribution to the total gross output in this industry in the eastern and northern regions combined was only 9 percent.

About 95 percent of the forestry industry gross output value was from the northern region compared to less than 1 percent for the central region. The central region had the highest contribution to the total gross output value in the mining, quarrying, and manufacturing industry (43 percent) and trade and services (38 percent). The eastern region had the highest contribution from hotels, restaurants and eating places to the gross output value (39 percent).

**Table 8.20.1: Gross output by industry**

Industry	Regions			
	Central	East	North	West
Livestock, poultry, bee-keeping, and fishing	39.7	2.9	5.9	51.5
Forestry	0.3	2.3	94.7	2.7
Mining, quarrying, and manufacturing	43.4	24.4	19.7	12.6
Hotels, lodges, bars, restaurants, and eating places	35.1	39.1	6.1	19.8
Trade and services	38.1	34.9	12.9	14.2

### **8.21 Summary of Findings**

The informal sector is gaining prominence in Uganda. About 36 percent of the households in Uganda own non crop enterprises.

The major enterprises being in the manufacturing, and, trade and services economic sectors. These two categories employ 1.8 million persons while livestock, poultry, bee-keeping, and fishing industry employs another 0.5 million persons.

Most household based enterprises are sole proprietorship while the major source of finance for such businesses are own savings. However, for those that got a loan, land was the major term of collateral used.

**APPENDIX I**

**REFERENCES**

---

1. Ministry of Finance, Planning and Economic Development, Poverty Eradication Action Plan (PEAP), Volume III, December 2001.
2. Ministry of Finance, Planning and Economic Development, Poverty Status Report.
3. Uganda Bureau of Statistics, Uganda National Household Survey 1999/2000- Socio-Economic Report, January 2001.
4. Uganda Bureau of Statistics, 2002 Statistical Abstract, November 2002.
5. Uganda Bureau of Statistics & ORC Macro, Uganda Demographic and Health Survey 2000/01.
6. Uganda Bureau of Statistics & ORC Macro, 2002 DHS EdData Survey 2001.
7. Uganda Bureau of Statistics, Report of the First Monitoring Survey 1993/94.
8. Uganda Bureau of Statistics, Provisional Results of the 2002 Population and Housing Census.
9. Appleton (2001a) Changes in Poverty in Uganda, 1992-1997, chapter in P. Collier and R. Reinnikka (eds.) Firms, households and government in Uganda's recovery, World Bank: Washington DC.
10. Appleton (2001b) Poverty in Uganda, 1999/00: Preliminary estimates from the UNHS, mimeo, School of Economics, University of Nottingham: Nottingham.
11. Datt, G. and M. Ravallion (1992), Growth and redistribution components of changes in poverty measures: a decomposition with application to Brazil and India in the 1980s, *Journal of Development Economics* 38:275-295
12. Foster, J., Greer, J. and Thorbecke, E. (1984), A Class of Decomposable Poverty Measures, *Econometrica*, 52: 761-6.
13. Kakwani, N., Statistical Inference in the Measurement of Poverty, *Review of Economics and Statistics*, 75(4): 632-639.
14. Ravallion, Martin and Benu Bidani (1994), How robust is a poverty line? *World Bank Economic Review* 8(1): 75-102.
15. Sen, Amartya (1985) Commodities and capabilities, Amsterdam: Elsevier.
16. World Bank (2001), World Development Report 2000/01: Attacking Poverty, (New York: Oxford University Press)
17. WHO (1985), Energy and protein requirements, *WHO Technical Report Series 724*, WHO: Geneva
18. Maria Gonzalez, Jack L. Ogus, Gary Shapiro and Benjamin Tepping, Standards for Discussion and Presentation of Errors in Surveys and Census Data, *Journal of the American Statistical Association*, September 1975, Volume 70.

## **APPENDIX II (A)**

### **METHODOLOGY OF MEASURING POVERTY**

---

#### **1 Measuring Welfare**

As stated in the World Development Report 2000/2001, “poverty is pronounced deprivation in well-being”. Consequently, measuring wellbeing – or welfare – is the first step in measuring poverty. It is widely recognised that there are many dimensions of wellbeing. This was one apparent from “Voices of the Poor”, a widespread consultation with poor people in developing countries conducted by the World Bank for their World Development Report 2000/2001. From people’s responses, a large number of dimensions of wellbeing were listed ranging from material wellbeing (including lack of food, shelter, clothing, poor housing) through physical well-being and security to less tangible aspects such as freedom of choice and social well-being.

In this chapter, we focus rather narrowly on private consumption as our measure of welfare. Such a monetary measure of welfare is useful as a single indicator because it is likely to affect several dimensions of wellbeing, notably aspects of material wellbeing. As such monetary measures are arguably among the most comprehensive single measures of welfare. It is possible to try to construct composite indices of welfare that cover more dimensions of well-being, but it is often hard to quantify some non-material aspects of well-being and the weights used in aggregating different aspects are inevitably rather arbitrary. A preferable procedure is probably to look at monetary measures of welfare while at the same time looking at other single indicators that measure different dimensions of wellbeing. For example, other chapters of this report present measures of education and health outcomes. These can be regarded as important aspects of wellbeing and provide additional information to the monetary statistics presented here. Although non-monetary dimensions of wellbeing are likely to be correlated with monetary measures of wellbeing, the correlation is far from perfect.

One would expect a household’s total consumption to be highly correlated with its income. There are three reasons for preferring consumption to income as a measure of monetary welfare. First, consumption may be a better measure of a household’s long-term income than income in any one year. Annual incomes may fluctuate due to variations in the harvest or other temporary changes, but households are likely to use saving and borrowing try to smooth their consumption in the face of such transient changes in income. Secondly, in



developing countries where most people work as smallholders or in informal enterprises, consumption may be more accurately measured by surveys than income is. Thirdly, it might be held that what people actually consume with their money affects their wellbeing more than what they simply earn.

A serious limitation with monetary measures of welfare is that they are typically observed only at the household, rather than individual, level. It is very hard to determine what each individual in the household consumes and conventionally surveys do not attempt to do this. Consequently, if households do not share consumption equally among their members, it is likely that monetary measures of well-being under-estimate inequality and poverty. Since households are of different sizes, it is common to look at household consumption per capita. However, household members of different ages and sexes have different needs. For example, the WHO estimates calorie requirements to vary with age and sex. We allow for this by looking at the number of "adult equivalents" in a household, where the adult equivalence scales are based partly on calorie requirements. For example, the WHO estimates that a one-year old boy requires 1200 calories per day and while a man engaged in subsistence farming requires around 3000 calories. Hence we treat a one-year old boy as being equivalent to 0.40 of an adult male. Our welfare measure is thus total household consumption divided by the total number of adult equivalents in the household.

## 2 Setting the Poverty Line

Given a monetary measure of welfare, we assess whether people are poor according to whether their level of welfare falls below the poverty line. Conceptually, the poverty line is the level of welfare that is regarded as the minimum people can enjoy without being regarded as poor. However, setting such a poverty line in practice is problematic and ultimately involves a large amount of judgement about what individuals need. Part of the problem is that it is impossible to draw a precise line that meaningfully distinguishes between people just on either side of the line. For example, if we use a "dollar a day" poverty line, it is untenable to argue that those existing on one dollar are significantly better off than those existing on 99 cents. This is not a fatal problem with poverty lines, as they can still provide useful information. It is an argument for not focusing too exclusively on particularly poverty measures, but also looking more broadly at changes in welfare across the lower part of the income distribution.

More seriously, people are likely to have very different judgements about what are basic needs. As countries develop, norms about what is a reasonable standard of living are likely to be raised and so, in some sense, poverty in a particular country is likely to be relative – i.e. defined relative to the average living standards prevailing in that country. However, measuring poverty using a relative poverty line can be misleading when trying to measure changes in wellbeing of poorer people. For example, if poor people's welfare increases, but at a slower rate than the welfare of others, then poverty defined relative to average living standards may rise even though the poor are in fact better off. In what follows, we fix the poverty line over time so that it does not vary with the average level of welfare in the country. Hence, on our measures, poverty will change if and only if the actual living standards of the poor change. As Uganda develops, there will be an argument for reviewing the poverty line to match changing views of what is regarded as acceptable minimum poverty levels. But, when measuring development in the short term, it is more sensible to fix the line.

When deciding what level to fix a poverty line at, a common procedure in developing countries is to anchor the line according to some basic needs and to food needs in particular. In developing countries such as Uganda, food accounts for around a half of all consumption. No one could disagree that food is an important need – being necessary for survival, for health and for activities of daily life. Moreover, it is possible to assess food requirements with reasonable objectivity. In particular, the calories required to perform various tasks can be estimated and there is a degree of consensus around the benchmarks for calorie requirements set by WHO (1985). It could be questioned why there is an exclusive concern with calories, rather than looking at other aspects of food consumption. Typically, however, people eating sufficient calories are also found to be meeting their protein requirements. Deficiencies in specific minerals and vitamins may remain, but these kinds of deprivation may require more targeted nutritional interventions and are not necessarily linked to general economic deprivation. When setting a poverty line, allowance is made for the kinds of foods people actually eat, which in turn reflect wider considerations than just their calorific value.

We work with a poverty line that reflects the cost of meeting calorie requirements given the typical diets of poor Ugandans, and an estimate of meeting non-food requirements. According to the principles set out by WHO (1985), a man working in subsistence agriculture requires around 3000 calories per day. Consequently, we set our food poverty line at the cost of meeting that

requirement. Women and children typically require fewer calories and this is taken into account by comparing household consumption per adult equivalent (rather than per capita) with the poverty line. Many combinations of foods ("food baskets") could meet the requirement of 3000 calories. We focus on the food basket of the poorest 50% of Ugandans, ranked by consumption per adult equivalent. We use data from the 1993/94 First Monitoring Survey to identify the mean quantities of different food items consumed by the poorest 50%. This calorific value of this basket was estimated and then the quantity of food in the basket was scaled up so that it provided exactly 3,000 calories per day. The cost of this food basket was then taken to be the food poverty line. It should be noted that this is a national food basket, although in practice people in different regions of the country tend to eat different staple foods. The use of a national food basket may be more appropriate if we wish to assess the capacity of people to obtain sufficient calories, although regional food baskets may be more appropriate if we wish to assess whether the sufficient calories are actually obtained.

Although we specify a food poverty line based on detailed itemisation of needs, such a procedure is very problematic when applied to non-food needs. Non-food expenditures are so varied, the degree of subjectivity in specifying minimum requirements would make achieving consensus difficult. Instead, we follow the standard practice of simply making non-food requirements a mark-up on food requirements. Specifically, we follow Ravallion and Bidani (1994) in identifying non-food requirements as the non-food expenditure of those whose expenditure is just equal to the food poverty line. The rationale for this is that, since at this level of welfare the poor have sacrificed some of their need for calories, the non-food expenditures they have chosen to give priority to should also be regarded as meeting essential needs. We allow different locations (Central urban, Northern rural etc) to have different non-food requirements. This allows for the fact that people in urban areas typically spend a higher share of their budget more on non-food items, even controlling for income for a variety of reasons (such as higher housing costs and greater transport costs in getting to work).

As a result of non-food requirements being allowed to vary with location, we do not use one single "all Uganda" national poverty line. However, averaging across Uganda, the poverty line(s) came to around \$34 per capita per month in 1993/94 and hence were comparable the "\$1 a day" poverty line sometimes used for international poverty comparisons by the World Bank.

### 3 Aggregation over individuals

Given a welfare measure (consumption per adult equivalent) and a poverty line, we can identify which Ugandans are poor. The final issue in measuring poverty is to aggregate this information to obtain a single poverty statistic for Uganda. This is an example of an “index number problem”, in that we must reduce a vector – poverty status of millions of Ugandans – to a single scalar value.

We present the “Foster-Greer-Thorbecke” or “P-alpha” class of poverty indicators. These are defined generally as:

$$P_\alpha = \frac{1}{n} \sum_{i=1}^n \{\max[z-c_i, 0]\}^\alpha$$
 where  $z$  = poverty line;  $c_i$  = welfare

Three variants of these indicators are presented, according to the value of  $\alpha$ :

1.  $P_0$ , the poverty headcount, gives the percentage of Ugandans living below the poverty line ( $H=q/n$ ). This measure is very intuitive and easy to popularise. However, it has a serious conceptual deficiency in that it is insensitive to changes in the welfare of people below the poverty line (this is termed violating the principle of monotonicity). It would be possible for the welfare of all the poor to be halved and as long as the non-poor were not affected, the poverty headcount would be unchanged.
2.  $P_1$ , the poverty gap indicator, measures how far the welfare of the poor lies below the poverty line. It is measured as:  $P_1 = \frac{1}{n} \sum_{i=1}^n \max [z-c_i, 0]/z$ . Verbally, it can be thought of as showing the cost of eliminating poverty through perfectly targeted transfers to the poor, expressed as a fraction of the poverty line per Ugandan. (So if  $P_1=0.1$ , eliminating the poverty gap through perfect transfers would cost 10% of the poverty line per Ugandan.) In practice, it is impossible to perfectly target transfers (i.e. to give the poor (only) exactly enough money to raise their consumption to just above the poverty line). The advantage of the poverty gap measure over the headcount is that the poverty gap is sensitive to changes in the welfare of the poor. It has two disadvantages. Firstly, it is rather less intuitive and harder to publicise. Secondly, it is not sensitive to redistribution of welfare among the poor. For example, if money was taken from the less poor to the extremely poor, we would tend to conclude that this reduced poverty but the  $P_1$  indicator would be unchanged (this is termed violating the principle of transfers).
3.  $P_2$ , the squared poverty gape,  $P_2 = \frac{1}{n} \sum_{i=1}^n \{\max[z-c_i, 0]\}^2$ . This measure is sensitive to redistribution amongst the poor but is the least intuitive of the P-alpha measures.

In practice, the three P-alpha indicators often tend to move in a similar direction and so choosing between them is seldom required. A great advantage of the P-alpha class of indicators is that they are additively decomposable. For example, if we split the population into two groups (say urban and rural), then national poverty indicator is equal to the sum of the poverty indicators for the two groups, weighted by their population shares, i.e.  $P = \sum_{j=1, J} n_j/n P_j$ . It is also possible to conduct statistical testing using the indicators, with the formulae for their standard errors being given in Kakwani (1990).

**APPENDIX II (B)**

**DATA ISSUES**

**1 Alternative Treatment of Inflation**

We use the CPI to adjust for inflation, however the CPI is based solely on prices in urban areas and may not reflect trends experienced by the majority of Ugandans who live in rural areas. To investigate this, we computed a food price index from the unit values for food purchases in the surveys (Table 3 refers)<sup>7</sup>. The index implies that prices were broadly flat between 1999/00 and 2002/03. This contrasts somewhat with the CPI, which shows food prices fell by 2.4 percent in the period. However, this is not necessarily a contradiction since the CPI is based mainly on prices in urban areas, especially urban areas in Central region. The survey-based food price index also records prices falling in Central urban areas. It is notable that the survey-based food price index shows a 6 percent rise in food prices between the surveys in rural Eastern areas, possibly indicative of a poor harvest. In the past, poverty estimates for Uganda have relied on the CPI to adjust for inflation rather than using a survey-based food price index. This judgement reflects a difficult trade-off – between the wider geographic coverage of the survey-based measure and the more careful measurement of the CPI. When comparing 1999/00 and 2002/03, using the survey-based measure is likely to lower the estimated real growth of consumption and worsen the estimate of poverty trends.

**Appendix Table: Food price index based on survey unit values**

	IHS	MS-1	MS-2	MS-3	MS-4	UNHS	2002/03
Central Rural	112.9	123.9	127.9	134.8	180.5	171.2	167.7
Central Urban	135.8	134.3	149.6	151.3	186.7	189.3	183.0
East Rural	96.0	87.5	106.6	108.1	165.0	142.7	151.4
East Urban	115.0	108.0	125.5	114.9	176.8	150.8	160.0
West Rural	88.6	83.3	93.0	99.6	144.7	145.8	145.3
West Urban	104.7	90.5	102.1	112.7	156.2	165.3	151.5
North Rural	83.6	84.7	92.2	90.6	128.7	128.7	126.4
North Urban	94.7	93.4	98.8	99.3	143.4	125.6	136.9
National	100	98.8	109.8	113.2	159.9	152.1	152.6
CPI Food	100	100.0	113.0	120.1	150.9	152.1	148.5

<sup>7</sup> This food price index is used in the main estimates to adjust for regional variations in food prices. However, it is not used to adjust for inflation – i.e. it set to average 100 in each survey and only the CPI is used to adjust for intertemporal variation in prices.

*Seasonality*

Although both the 1999/00 and 2002/03 were annual surveys, the latter survey conducted virtually no interviews in September due to the gathering of the census in that month. For some parts of the country, September is a harvest month and thus its omission may lead to a downward bias in the figures for consumption, particularly food consumption, in 2002/03. This possibility was reinforced by investigation of data for the 1999/00, where consumption estimates for households surveyed in September were somewhat (around 5 percent) higher than the average for households surveyed in the rest of the year. However, seasonality effects may vary from survey to survey and there is no over-riding reason to look only at the patterns in the 1999/00. To explore the issue more thoroughly, data were pooled for all seven household surveys from the IHS to 2002/03. The log of real private consumption per adult equivalent was regressed on dummy variables for location (e.g. Central urban), for month of the year and for the survey. The results of this regression implied that consumption tended if anything lower to be lower (by about 2.5 percent) in September than in the other months. Consequently, using this approach to adjust for seasonality would worsen estimates of recent poverty trends.

**APPENDIX III**

**SAMPLING DESIGN FOR THE UNHS 2002/2003**

---

**Sampling Design and Sample Size**

*The major objective UNHS 2002/2003 was to provide high quality data on population and socio-economic characteristics at household and community levels. Stratified two stage sampling was adopted, but with a few refinements such as over-sampling of urban areas, and possibly of some rural areas with concentrated informal sector activity. The sampling frame for selection of first stage units (fsus) was the list of EAs with the number of households based on cartographic work for the 2002 Population and Housing Census. For selection of the second stage units, which were the households, listing exercise through listing schedules was done in selected EAs.*

Each district was a stratum and was divided into rural and urban sub-strata. The Urban area was further sub-divided into district town and other urban areas. This deep stratification enabled a better spread and representation of the sample, thereby increasing the efficiency of the estimates. Additionally, the continuity over rounds was maintained to enable pooling of results over rounds, if ever considered necessary. The total number of fsus i.e. about 1,000 was firstly allocated between urban and rural in the proportion of 40:60. Thereafter, the urban and rural sample was generally allocated between the strata in proportion to the number of households with certain adjustments. The allocated sample was selected with probability proportional to number of households. A suitable plan for sub-stratification and selection of households at the listing stage, was introduced to ensure adequate representation of households with at least one unemployed person and an informal sector enterprise activity.

The households were at first divided into 2 groups namely; households with at least one unemployed person and households with no unemployed person. The total 10 sample households in an EA were allocated between the unemployed and employed groups. Half of the sample from the unemployed was selected from households having one or more household enterprises, while the other was selected from the households having no enterprise activity. In case any one of the sub-groups did not exist, the total sample would be allocated to the existing sub-group. For odd sample sizes, the group with household enterprises got preference.



The households to be selected from the group that did not have any unemployed person were sub-stratified by kind of informal sector activity. The allocation between the sub-groups was in proportion to the number of households, with a minimum of 1 from each group.

### **Allocation of Sample between Strata and Balancing the Design**

As explained earlier, the allocation of the total sample between strata, was not strictly proportional to the number of households. Firstly, the urban areas were over-sampled and secondly some areas both in rural and urban were over or under sampled on the basis of degree of concentration of informal sector activity. Precise information on the concentrated areas could be formed basing on the experience of the listing exercise for the Uganda Business Inquiry (UBI) which is in progress. Another refinement in the design, which was made was to have a balanced independent inter-penetrating network of sub-samples (IPNS), on a quarterly basis to enable studying seasonality of some survey variables, to provide independent quarterly estimates and to eliminate seasonal effects while taking the average over four quarters. As mentioned earlier, the need for spreading the survey over a 12-month period and balancing the design arose because of inclusion of labour-force and informal sector survey modules in this round. Ugandan experience indicates the presence of seasonality especially in self-employed activities. But this aspect has never been studied precisely in the past and Users need these data from this round.

### **Estimation Procedure and Calculation of Weights/Multipliers**

Estimates were built initially at the basic stratum-level and then added over strata to obtain the needed final estimates. As an illustration, in order to derive the necessary formulae for estimation, an estimate of the total  $Y_R$ , say total number of gainfully employed persons in the  $R^{\text{th}}$  stratum (say rural areas of a district) can be obtained using the following steps:

#### **First Step**

There are nine sub-strata of households by employed/unemployed and kind of informal enterprises formed in each selected EA. The first step will be to get an estimate of gainfully employed in the  $i$ -th selected EA by adding all the estimates of all the sub-strata by using the formula given below:

$$\hat{Y}_{Ri} = \sum_{l=1}^9 \frac{N_l}{n_l} \sum_{k=1}^{n_l} y_{ilk} \dots\dots\dots(1)$$

Where;

$Y_{ilk}$  = gainfully employed persons in the k-th household in the l-th sub-stratum of the i-th EA;

$N_l$  = total number of households in the l-th sub-stratum;

$n_l$  = number of sample households in the l-th sub-stratum.

**Second step**

The next step will be to build estimates for the district rural ( $Y_R$ ) by deriving estimates from each sample EA and averaging over all sample EAs using the formula given below:

$$\hat{Y}_R = \frac{1}{m} \sum_{i=1}^m \frac{h_o}{h_i} \sum_{l=1}^9 \frac{N_l}{n_l} \sum_{k=1}^{n_l} y_{ilk} \dots\dots\dots(2)$$

Where;

$M$  = number of sample EAs selected in the district rural stratum;

$h_o$  = total number of households in the district – rural stratum as per the latest available records used for sample selection;

$h_i$  = total number of households in the i-th sample EA as per the latest available records.

Estimates of district total can be got by adding estimates over two or three strata as the case may be. Similarly, regional and national estimates can be prepared by simple additions.

The table below gives the stratum-wise distribution of allocated sample of first stage units (fsus) for UNHS 2002/03. The fsus were the EAs.

**District-wise Distribution of the Allocated Sample of First Stage Units (EAs) – UNHS 2002/03**

**Central Region**

<i>Ser. No.</i>	<i>District</i>	District Town	Other Urban	Rural	Total
1	KALANGALA	4	-	4	8
2	KAMPALA	28	-	-	28
3	KAYUNGA	4	4	8	16
4	KIBOGA	4	-	8	12
5	LUWERO	4	4	16	24
6	MASAKA	12	8	20	40
7	MPIGI	2	2	16	20
8	MUBENDE	4	4	16	24
9	MUKONO	4	8	20	32
10	NAKASONGOLA	2	2	4	8
11	RAKAI	2	2	16	20
12	SEMBABULE	2	2	8	12
13	WAKISO	12	12	16	40
Total		84	48	152	284

**Eastern Region**

<i>Ser. No.</i>	<i>District</i>	District Town	Other Urban	Rural	Total
1	BUGIRI	3	1	12	16
2	BUSIA	8	-	8	16
3	IGANGA	6	2	16	24
4	JINJA	16	4	8	28
5	KABERAMAIDO	4	-	4	8
6	KAMULI	3	1	16	20
7	KAPCHORWA	4	-	8	12
8	KATAKWI	4	-	8	12
9	KUMI	4	-	8	12
10	MAYUGE	-	4	8	12
11	MPALE	14	2	16	32
12	PALLISA	4	-	12	16
13	SIRONKO	4	-	12	16
14	SOROTI	10	2	8	20
15	TORORO	8	4	12	24
Total		92	20	156	268

*Uganda National Household Survey 2002/3*

---

**Northern Region**

<i>Ser. No.</i>	<i>District</i>	District Town	Other Urban	Rural	Total
1	ADJUMANI	4	-	4	8
2	APAC	4	-	16	20
3	ARUA	4	4	16	24
4	GULU	12	-	12	24
5	KITGUM	4	-	8	12
6	KOTIDO	4	4	8	16
7	LIRA	8	-	24	32
8	MOROTO	4	-	8	12
9	MOYO	4	-	8	12
10	NAKAPIRIPIT	2	2	4	8
11	NEBBI	4	4	8	16
12	PADER	-	4	8	12
13	YUMBE	-	-	4	4
Total		54	18	128	200

**Western Region**

<i>Ser. No.</i>	<i>District</i>	District Town	Other Urban	Rural	Total
1	BUNDIBUGYO	2	2	4	8
2	BUSHENYI	4	-	16	20
3	HOIMA	4	-	8	12
4	KABALE	8	-	16	24
5	KABAROLE	10	2	12	24
6	KAMWENGE	4	-	8	12
7	KANUNGU	-	4	8	12
8	KASESE	6	6	12	24
9	KIBAALE	4	-	4	8
10	KISORO	4	-	8	12
11	KYENJOJO	-	4	8	12
12	MASINDI	4	4	8	16
13	MBARARA	12	4	24	40
14	NTUNGAMO	4	-	8	12
15	RUKUNGIRI	4	-	8	12
Total		70	26	152	248
Total – All Uganda		300	112	588	1000

*Note: Out of the originally selected 1000 EAs, a total of 973 EAs were covered. 27 EAs could not be covered because of insecurity.*

## Appendix IV

### SAMPLING ERRORS

---

#### Introduction

The statistics in this report are estimates derived from a sample survey. There are two types of errors possible in any estimate based on a sample survey – *sampling* and *non-sampling* errors.

Non-sampling errors can be attributed to many sources which include: definitional difficulties, differences in the interpretation of questions by the interviewers, inability or unwillingness to provide correct responses on part of the respondents, mistakes in coding or recording the data, et cetera. Nonsampling errors would also occur in a complete census.

On the other hand, sampling errors occur because observations are made only on a sample, and not the entire population. Thus the accuracy of survey results is determined by the joint effects of the sampling and nonsampling errors.

For a given indicator, the sampling error is usually measured by the standard error. The standard error of a survey estimate is a measure of the variation among the estimates from all possible samples, and is a measure of the precision with which an estimate from a particular sample approximates the results from all possible samples. The accuracy of a survey result depends on both the sampling and nonsampling error measured by the standard error and the bias; and other types of nonsampling errors not measured by the standard error.

The standard errors of the rates presented in this appendix were computed using the SAS<sup>®</sup> PROC SURVEYMEANS procedure. This procedure does not assume that the data was taken from a simple random sample, but rather from a more complex design. The SurveyMeans Procedure takes into account the effect of clustering and stratifying in the calculation of the variances and standard errors, using the Taylor expansion method to estimate these sampling errors.

The sampling errors are computed for selected variables considered to be of interest, but can be computed for all variables in the dataset. The sampling errors are presented for the country as a whole, for women and men where relevant, and for rural and urban areas and for each of the four regions: Central, East, West and North. For each variable the type of statistic (mean, sum, rate) are given as well as the standard error, the 95% confidence limits, and the coefficient of variation.

Generally the standard errors of most national estimates are small and within acceptable limits, but there is wider variability for the estimates of the sub-populations. For example for the Net Attendance Ration (NER), the standard error for the whole country is 6.5 percent, while for urban and rural areas it is 7.6 and 7.3 percent respectively.

*Uganda National Household Survey 2002/3*

**TOTAL HOUSEHOLD POPULATION**

	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	25,276,800	669,630	23,937,600	26,616,100	2.69	9,711
Urban	3,477,400	147,532	3,187,900	3,766,900	4.2	4,062
Rural	21,799,500	740,356	20,346,500	23,252,463	3.3	5,649
Central	7,484,465	349,137	6,799,305	8,169,624	4.66	2,831
Eastern	6,934,413	370,063	6,208,186	7,660,641	5.34	2,675
Northern	4,605,676	316,267	3,985,022	5,226,329	6.87	1,730
Western	6,252,314	326,821	5,610,946	6,893,682	5.23	2,475

**TOTAL NUMBER OF HOUSEHOLDS**

	Estimate	Standard Dev.	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	4,938,400	120,866	4,701,193	5,175,606	2.45	9,711
Urban	843,568	36,006	772,904	914,232	4.27	4,062
Rural	4,094,832	133,232	3,833,358	4,356,306	3.25	5,649
Central	1,558,127	60,932	1,438,552	1,677,702	3.91	2,831
Eastern	1,266,694	61,469	1,146,066	1,387,323	4.85	2,675
Northern	905,729	59,427	789,107	1,022,351	6.56	1,730
Western	1,207,849	59,883	1,090,332	1,325,367	4.96	2,475

**AVERAGE HOUSEHOLD SIZE**

	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	5.1	0.046	5.03	5.21	0.90	9,711
Urban	4.1	0.07	3.97	4.28	1.94	4,062
Rural	5.3	0.05	5.22	5.42	0.95	5,649
Central	4.8	0.09	4.62	4.99	1.94	2,831
Eastern	5.5	0.08	5.31	5.64	1.50	2,675
Northern	5.1	0.11	4.88	5.29	2.10	1,730
Western	5.2	0.08	5.01	5.34	1.59	2,475

**AVERAGE HOUSEHOLD EXPENDITURE**

	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	136,461	4,476	127,676	145,246	3.28	9,711
Urban	258,049	22,792	213,319	302,779	8.83	4,062
Rural	111,412	2,972	105,579	117,245	2.67	5,649
Central	202,270	13,060	176,640	227,900	6.46	2,831
Eastern	112,075	3,851	104,517	119,633	3.44	2,675
Northern	72,881	3,036	66,922	78,840	4.17	1,730
Western	124,811	3,812	117,331	132,292	3.05	2,475

*Uganda National Household Survey 2002/3*

**NET ENROLMENT RATIO (for Children Aged 6 – 12)**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	85.60	0.65	84.31	86.88	0.76	11, 353
Male	85.07	0.82	83.46	86.68	0.97	5, 503
Female	86.09	0.76	84.60	87.60	0.89	3, 984
Urban	90.53	0.76	89.05	92.01	0.84	7, 369
Rural	84.96	0.73	83.52	86.41	0.86	185
Central	85.09	0.85	83.42	86.77	1.00	2, 928
Eastern	90.16	0.65	88.88	91.44	0.72	3, 134
Northern	76.65	2.46	71.82	81.48	3.21	2,208
Western	87.30	1.15	85.04	89.56	1.32	2,289

**LITERACY RATE (for Population Aged 10 years and above)**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	68.72	0.64	67.47	69.97	0.93	31,066
Male	75.83	0.64	74.57	77.09	0.85	14,767
Female	62.23	0.81	60.63	63.82	1.31	16,299
Urban	85.55	0.58	84.41	86.68	0.68	12,412
Rural	65.66	0.75	64.19	67.14	1.14	18,654
Kampala	91.56	1.08	89.45	93.67	1.18	785
Central	76.12	1.15	73.87	78.38	1.51	7,978
Eastern	61.79	0.96	59.91	63.66	1.55	8,643
Northern	54.91	1.82	51.34	58.47	3.31	5,464
Western	72.83	1.09	70.70	74.96	1.49	8,196

**LITERACY RATE (for Population Aged 18 years and above)**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	67.6	0.70	66.27	69.02	1.0	20,637
Male	78.76	0.69	77.41	80.13	0.9	9,599
Female	57.98	0.92	56.16	59.80	1.6	11,038
Urban	86.60	0.61	85.41	87.80	0.7	84,78
Rural	63.86	0.83	62.2	65.50	1.3	12,159
Kampala	92.68	1.09	90.55	94.81	1.2	595
Central	77.74	1.30	75.18	80.29	1.7	5,163
Eastern	59.24	1.08	57.11	61.36	1.8	5,784
Northern	52.50	1.84	48.89	56.11	3.5	3,612
Western	70.41	1.24	67.98	72.85	1.8	5,483

*Uganda National Household Survey 2002/3*

**PROPORTION THAT REPORTED BEING ILL OR INJURED IN 30 DAYS PRECEDING THE SURVEY**

	%age	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	28.34	0.40	27.54	29.13	1.4	50,510
Male	27.11	0.47	26.18	28.04	1.8	24,500
Female	29.50	0.48	28.55	30.45	1.6	26,008
Urban	26.55	0.82	24.94	28.15	3.1	26,555
Rural	28.63	0.46	27.73	29.53	1.6	28,630
Kampala	27.21	1.82	23.65	30.78	6.8	1,121
Central	27.73	0.59	26.58	28.89	2.1	27,730
Eastern	35.24	0.81	33.65	36.84	2.3	35,240
Northern	24.54	0.90	22.78	26.30	3.7	24,540
Western	24.31	0.85	22.64	25.99	3.5	24,310

**PROPORTION THAT USUALLY SLEEPS UNDER A MOSQUITO NET**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Uganda	10.7	0.51	9.7	11.7	4.8	50,510
Male	10.1	0.50	9.1	11.1	4.9	24,500
Female	11.3	0.57	10.2	12.4	5.0	26,008
Urban	27.6	1.59	24.5	30.8	5.8	19,558
Rural	7.9	0.51	6.9	8.9	6.5	30,952
Kampala	37.5	3.5	29.9	45.1	10.2	1,121
Central	8.8	0.91	7.0	10.6	10.3	12,847
Eastern	10.2	0.93	8.4	12.0	9.1	14,427
Northern	9.2	1.23	6.8	11.6	13.4	9,156
Western	8.5	0.89	6.8	10.2	10.5	12,959

**PROPORTION REPORTING A PARTICULAR ILLNESS, UGANDA**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Malaria	55.9	0.7	54.4	57.3	1.3	13,951
Respiratory	14.2	0.5	13.1	15.2	3.8	13,951
Measles	3.0	0.3	2.3	3.6	11.2	13,951
Diarrhea	4.0	0.2	3.5	4.5	6.0	13,951

**PROPORTION SEEKING TREATMENT AT A GIVEN FACILITY, UGANDA**

	Percentage	Standard Error	95% Confidence Interval		Coefficient of Variation	Number of observations
			Lower	Upper		
Government	23.74	0.82	22.13	25.35	3.46	13,951
Private	51.89	0.94	50.05	53.74	1.81	13,951
NGO	4.10	0.38	3.35	4.85	9.28	13,951



*Uganda National Household Survey 2002/3*

---

**PROPORTION OF HOUSEHOLDS HAVING A PARTICULAR CHARACTERISTIC, FOR SELECTED INDICATORS**

	Indicator	Percent age	Standard Error	95% Confidence Interval		CV (%)	No. of obs.
				Lower	Upper		
House Type	Detached	52.6	1.1	50.3	54.8	2.2	9,711
	Muzigo	17.3	0.8	15.7	18.8	4.7	9,711
Tenure	OwnerOccupied	77.4	0.8	75.8	79.1	1.1	9,711
	Rented	16.0	0.8	14.5	17.5	4.7	9,711
	Free	4.6	0.3	3.9	5.2	7.1	9,711
Roof Type	Iron Sheets	63.3	1.1	61.1	65.6	1.8	9,711
	Thatched	2.4	0.3	1.9	2.9	10.6	9,711
Wall Type	Bricks	50.7	1.2	48.4	53.1	2.4	9,711
	Mud/Poles	45.8	1.2	43.5	48.1	2.6	9,711
Floor Type	Cement	24.0	0.9	22.3	25.7	3.7	9,711
	Earth	73.5	0.9	71.7	75.4	1.3	9,711
	Concrete/Stone	2.0	0.2	1.6	2.4	10.0	9,711
Lighting Fuel	Electricity	9.4	0.6	8.2	10.6	6.7	9,711
	Paraffin	85.3	0.8	83.9	86.8	0.9	9,711
Cooking Fuel	Electricity	0.5	0.1	0.3	0.8	26.0	9,711
	Paraffin	1.6	0.2	1.2	1.9	11.1	9,711
	Charcoal	18.0	0.8	16.4	19.6	4.5	9,711
	Wood	78.2	0.9	76.5	79.9	1.1	9,711
Household Ownership of	Car	1.7	0.2	1.3	2.1	11.4	9,711
	Motor cycle	3.0	0.2	2.6	3.5	7.3	9,711
	Bicycle	42.7	0.9	41.0	44.4	2.1	9,711
	Boat/Canoe	0.5	0.1	0.3	0.7	18.3	9,711
	Television	6.9	0.5	5.9	7.8	6.8	9,711
	Radio	63.3	0.9	61.6	65.0	1.4	9,711
	Mobile phone	6.6	0.5	5.7	7.6	7.2	9,711
	Fixed Phone	0.4	0.1	0.2	0.5	25.4	9,711
	Postal Address	1.7	0.2	1.3	2.1	12.5	9,711
	E-mail address	0.8	0.2	0.4	1.2	24.5	9,711