



THE REPUBLIC OF UGANDA



EUROPEAN UNION

OFFICE OF THE PRIME MINISTER

Nutrition Situation Report

UGANDA NATIONAL PANEL SURVEY 2018/19 – 2019/20



OPM/NIPN Nutrition Situation Report Series No. 1



unicef 
for every child

CITATION:

Nutrition Situation Report
Uganda National Panel Survey 2018/19- 2019/20

COVER PHOTOGRAPH:

A Child in Kampala eating an orange in the company of her pregnant mother.
Photo Credit: © NIPN Uganda

©2021 OPM/NIPN:

All rights reserved. No part of this publication may be reproduced, stored in a retrieved system without permission of the publisher, unless it is done for academic or charitable purpose or for purposes of informing public policy.

ISBN 978-9913-638-00-5

CONTACT:

Office of the Prime Minister
Plot 9 - 11 Apollo Kaggwa Road, Kampala
P. O. Box 314, Kampala Uganda.

 +256-414-000000  ps@opm.go.ug  www.opm.go.ug  [@NipnOpm](https://twitter.com/NipnOpm)



THE REPUBLIC OF UGANDA

OFFICE OF THE PRIME MINISTER

Nutrition Situation Report

UGANDA NATIONAL PANEL SURVEY

2018/19 – 2019/20

OPM/NIPN Nutrition Situation Report Series No. 1

November 2020

PREFACE

Good nutrition is a catalyst for social and economic development. At no time has nutrition been more important such as the time we live in with the current COVID-19 pandemic. Better nutrition is important in the achievement of the prosperity of communities and the nation at large. Nutrition is core to the achievement of the human capital development program of the National Development Plan III. Investments in nutrition have multiple benefits including the reduction of child mortality, improvement wages, improvement women empowerment, reduction of poverty and an increase years of school attendance.

The Uganda Bureau of Statistics stands in its commitment to respond to information needs and data use by its stakeholders. Starting with the very first Uganda National Panel Survey in 2009/10, the panel survey has collected and continually increased various indicators related to nutrition. In 2018/19, the Bureau institutionalized a National Information Platform for Nutrition (NIPN) in partnership with the Office of the Prime Minister. Funded by the European Union, the NIPN has been adopted by the Bureau to strengthen national capacity to manage and analyze existing information to influence policies and programs to improve human nutrition and health outcomes. The NIPN has taken advantage of the richness of data within the panel survey and other datasets to provide an in-depth analysis of information for the first panel Nutrition Situation Report.

The Nutrition Situation Report is a component of the main panel report. The report communicates the findings on nutrition situation in the panel that can be used by stakeholders to develop informed strategies to solve malnutrition. We are grateful to the World Bank and the Government of Uganda for the financial assistance that enabled undertaking of the survey and the European Union for funding the analysis required through the NIPN. Further gratitude is extended to all the field staff who worked tirelessly to successfully implement the survey; and to the survey respondents who provided the valuable information on which this report is based. To the Local Governments (LGs), your unreserved support during the data collection is highly appreciated. We are also greatly indebted to you all for the invaluable cooperation.



Imelda Atai Musana (PhD)

For: Executive Director

November 2020

TABLE OF CONTENTS

List of Acronyms	X
Executive Summary	Xi
1.0 INTRODUCTION	1
1.1 Overview	2
1.2 Survey objectives	2
1.3 Scope	2
1.4 Survey design	3
1.5 Tracking	4
1.6 Fieldwork	4
1.7 Data processing and management	4
2.0 POPULATION CHARACTERISTICS	5
2.1 Introduction	7
2.2 Characteristics of household heads	7
2.3 Average household size	8
2.4 Marital status of household members	9
2.5 Housing characteristics and conditions	10
2.6 Dwelling and tenure status of Panel households	10
3.0 NUTRITION STATUS	12
3.1 Nutrition status of children	14
3.2 Nutrition status of adolescents	21
3.3 Nutrition status of women	21
3.4 Nutrition status of men	26
List of Tables	30
4.0 NUTRITION SPECIFIC INDICATORS	40
4.1 Maternal Infant Young Child Adolescent and Adult Nutrition (MIYCAAN)	42
4.2 Household meal frequency	48
4.3 Nutrition in child health care	48
List of Tables	52
5.0 NUTRITION SENSITIVE INDICATORS	75
5.1 Food availability and expenditure	77
5.2 Nutrition in education and sports	78
List of Tables	82
DEFINITION OF TERMS	87

LIST OF FIGURES

Figure 2.2:	Distribution of Panel Households by Headship, Residence and Region (%).....	7
Figure 2.3:	Distribution of Panel Households by Headship, Education level and Work status (%)	8
Figure 2.4:	Average Panel Household Size by Residence and Region	8
Figure 3.1.1:	National trends in stunting among children in the panel.....	14
Figure 3.1.1b:	Regional trends in stunting among children in the panel	15
Figure 3.1.2:	National trends in wasting among children in the panel	15
Figure 3.1.2b:	Regional trends in wasting among children in the panel.....	16
Figure 3.1.3:	National trends in underweight among children in the panel.....	17
Figure 3.1.3b:	Regional trends in underweight among children in the panel.....	17
Figure 3.1.4:	National trends in overweight among children in the panel.....	18
Figure 3.1.4b:	Regional trends in overweight among children in the panel	18
Figure 3.1.5:	National trends in anaemia among children in the panel.....	19
Figure 3.1.5b:	Regional trends in anaemia among children in the panel	19
Figure 3.1.6:	National trends of children who had a low birth weight in the panel.....	20
Figure 3.1.6b:	Regional trends of children who had a low birth weight in the panel	20
Figure 3.2.1:	National trends of adolescents who were overweight and obese in the panel	21
Figure 3.3.1:	National trends in the proportion of women of reproductive age that were anaemic ...	22
Figure 3.3.1b:	Regional trends in the proportion of women of reproductive age that were anaemic	22
Figure 3.3.2:	National trends in the proportion of women of that were underweight	23
Figure 3.3.2b:	National trends in the proportion of women that were underweight.....	23
Figure 3.3.3:	National trends in the proportion of women that were overweight	24
Figure 3.3.3b:	Regional trends in the proportion of women that were overweight.....	24
Figure 3.3.4:	National trends in the proportion of women that were obese	25
Figure 3.3.4b:	National trends in the proportion of women that were obese	25
Figure 3.3.5:	Regional trends in the proportion of women that had a raised blood pressure.....	26
Figure 3.4.1:	National trends in the proportion of men that were underweight.....	26
Figure 3.4.1b:	Regional trends in the proportion of men that were underweight	27
Figure 3.4.2:	National trends in the proportion of men that were overweight	27
Figure 3.4.2B:	Regional trends in the proportion of men that were overweight.....	28
Figure 3.4.3:	National trends in the proportion of men that were obese	28
Figure 3.4.3B:	Regional trends in the proportion of men that were obese.....	29

Figure 3.4.4:	Regional trends in the proportion of men with a raised blood pressure	29
Figure 4.1.1:	Trends in the proportion of children who were initiated on the breast within an hour of birth.....	43
Figure 4.1.2:	Trends in the proportion of bottle-fed children	43
Figure 4.1.3:	Trends in the proportion of children who met the required minimum dietary diversity ..	44
Figure 4.1.4:	Trends in the proportion of children who met the required MMF	45
Figure 4.1.5:	Trends in the proportion of children who met the required MAD.....	45
Figure 4.1.6:	Trends in the proportion of WRA (15-49 years) who met the required MDDW	46
Figure 4.1.7:	Trends in the proportion of children 6-23 months who received Vitamin A supplementation	47
Figure 4.1.8:	Trends in the proportion of children under 5 years who received deworming medication.....	47
Figure 4.2:	Trends in the proportion of households that provided two meals per day inclusive of breakfast.	48
Figure 4.3.1:	Trends in the proportion of children (0-23 months) that received measles and DPT 3 vaccinations.	49
Figure 4.3.2:	Trends in the proportion of children under 2 years had diarrhoea 2 weeks preceding the survey	49
Figure 4.3.3:	Trends in the proportion of children under 2 years had diarrhoea 2 weeks preceding the survey that was managed through giving ORS and Zinc.....	50
Figure 4.3.4:	Trends in the proportion of children under 5 years that had fever 2 weeks preceding the survey	51
Figure 4.3.5	Percentage of children under 5 years who slept under a mosquito net last night (night preceding interview).....	51
Figure 5.1.1:	Trends in the proportion of households that were faced with a situation of lack of enough food within the previous 12 months.....	77
Figure 5.1.2:	Trends in the proportion of households' food expenditure by food group.....	78
Figure 5.2.1:	Trends in the proportion of school-going children 6-12 years having meals at school..	79
Figure 5.3.1:	Trends in the proportion of household with access to improved sources of drinking water in the panel.....	79
Figure 5.3.2:	Trends in the proportion of household water source dynamics in the panel.....	80
Figure 5.3.3:	Trends in the proportion of household using soap and water for handwashing in the panel	81
Figure 5.3.4:	Trends in the proportion of household having access to improved toilet facilities in the panel	81

LIST OF TABLES

Table 2.1:	Marital status Household members 12 years and above by sex and wave (%).....	9
Table 2.2:	Marital status of Household members 18 years and above by sex and wave (%)	9
Table 2.3:	Percentage of Households with own dwelling by selected characteristics	10
Table 2.8:	Households with dwellings made of permanent construction materials by background characteristics (%)	11
Table 3.1.1:	The proportion of children under age 5 classified as malnourished according to three anthropometric indices: height-for-age, weight-for-height, and weight-for-age, according to residence and region, Uganda National Panel Surveys from 2009 to 2020.....	30
Table 3.1.2:	The proportion of children under age 5 classified as stunted according to the anthropometric index of nutritional status: height-for-age, according to background characteristics, UNPS 2015/2016, 2018/2019 and 2019/2020.....	32
Table 3.1.3:	The proportion of children under age 5 classified as wasted or overweight according to the anthropometric index of nutritional status: weight-for-height, according to background characteristics, UNPS 2015/2016, 2018/2019 and 2019/2020.....	33
Table 3.1.4:	The proportion of children under age 5 classified as underweight according to the anthropometric index of nutritional status: weight-for-age, according to background characteristics, UNPS 2015/2016, 2018/2019 and 2019/2020.....	34
Table 3.1.5:	The proportion of children age 6-59 months classified as having anaemia, according to background characteristics, UNPS 2018/2019 and 2019/2020	35
Table 3.1.6:	The proportion of last births in 2 years preceding the survey that has a reported birth weight, and among the last births in 2 years preceding the survey with a reported birthweight, a percentage less than 2.5kg, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020.....	36
Table 3.3.1:	The proportion of women age 15-49 with anaemia, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020	37
Table 3.3.2:	The proportion of thinness, overweight and obesity among both men and women by background characteristics, Uganda National Panel Surveys 2018/19 and 2019	38
Table 3.3.3:	The proportion of raised blood pressure both men and women by background characteristics, Uganda National Panel Surveys 2018/19 and 2019	39
Table 4.1.1a:	The proportion of children who are initiated of breastfeeding within 1 hour of birth, The Uganda National Panel Survey 2018/2019 and 2019/2020.....	52
Table 4.1.1b:	The proportion of children born in the previous 24 months of the survey that had ever been breastfed, The Uganda National Panel Survey 2018/2019 and 2019/2020.	53
Table 4.1.1c:	The proportion of last-born children aged 0-23 months who had ever breastfed and were given something other than breast milk during the first 3 days of life, The Uganda National Panel Survey 2018/2019 and 2019/2020.	54

Table 4.1.2a:	The proportion of last-born children aged 0-23 months who drunk anything from a bottle with a nipple the previous day before the interview, The Uganda National Panel Survey 2018/2019 and 2019/2020.	55
Table 4.1.2b:	The proportion of children aged 6 to 8 months who were introduced to solid, semi-solid or soft foods (complementary feeding), The Uganda National Panel Survey 2018/2019 and 2019/2020.	56
Table 4.1.3a:	The proportion of children 6-23 months (breastfed and non-breastfed children) that meet the required minimum dietary diversity, The Uganda National Panel Survey 2018/2019 and 2019/2020.	57
Table 4.1.3b:	The proportion of breastfed children (6-23 months) that meet the required minimum dietary diversity (MDD), UNPS 2018/2019 and 2019/2020.	58
Table 4.1.3c:	The proportion of non-breastfed children aged 6 to 23 months that meet the required minimum dietary diversity (MDD), The Uganda National Panel Survey 2018/2019 and 2019/2020.	59
Table 4.1.4a:	The proportion of children 6-23 months (both breastfed and non-breastfed children aged 6 to 23 months) that meet the required minimum meal frequency (MMF), The Uganda National Panel Survey 2018/2019 and 2019/2020.	60
Table 4.1.4b:	The proportion of breastfed children 6-23 months that meet the required minimum meal frequency (MMF), The Uganda National Panel Survey 2018/2019 and 2019/2020.	61
Table 4.1.4c:	The proportion of non-breastfed children 6-23 months) that meet the required minimum meal frequency (MMF), UNPS 2018/2019 and 2019/2020.	62
Table 4.1.5a:	The proportion of children 6-23 months (both breastfed and non-breastfed children) that meet the required minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.	63
Table 4.1.5b:	The proportion of breastfed children 6-23 months that meet the required minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.	64
Table 4.1.5c:	The proportion of non-breastfed children (6-23 months that met the minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.	65
Table 4.1.6	The proportion of women of reproductive age (15-49 years) that meet the required minimum dietary diversity (MDD), The Uganda National Panel Survey 2018/2019 and 2019/2020.	66
Table 4.1.7	The proportion of children 6-59 months who were given Vitamin A supplements in the 6 months preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020.	67
Table 4.1.8:	The proportion of children 6-59 months, given deworming medication in the 6 months preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020.	68

Table 4.2:	The proportion of Households that experienced food shortage in the last 12 months and the proportion of households having two or more meals including breakfast, The Uganda National Panel Surveys 2018/2019 and 2019/2020.....	69
Table 4.3.1:	The proportion of children age 12-23 months and 24-35 months who received DT3 & Measles Vaccination by the source of information (vaccination card or mother's report "Without a card") and household background Characteristics	70
Table 4.3.2:	The proportion of children who had diarrhoea 2 weeks preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020	71
Table 4.3.4:	The proportion of children who had diarrhoea 2 weeks preceding the survey, received treatment for diarrhoea according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020.....	72
Table 4.3.4:	The proportion of children under age 5 with symptoms of fever in the 2 weeks preceding the survey and percentage for whom advice or treatment was sought for fever	73
Table 4.3.5:	The proportion of children under 5 years who slept under a mosquito net last night (night preceding interview).....	74
Table 5.1.1:	The proportion of Households that experienced food shortage in the last 12 months and the proportion of households having two or more meals including breakfast, The Uganda National Panel Surveys 2018/2019 and 2019/2020.....	82
Table 5.1.2	The proportion of household food expenditure on food groups, Uganda National Panel Surveys 2018/2019 and 2019/2020	83
Table 5.2.1:	The proportion of school going children aged 6-12 years having meals at school.....	84
Table 5.3.1b:	The proportion of households with access to water and sanitation, Uganda National Panel Surveys 2018/2019 and 2019/2020.....	84
Table 5.3.21b:	The proportion of households by source of drinking water, using various methods to treat water and access to toilet facilities, The Uganda National Panel Surveys 2018/2019 and 2019/2020	85
Table 5.3.3:	The proportions of households using soap and water for handwashing, drinking five litres or more of water, time to the nearest water source, wait time at the water source and safe water sources that are user committee managed	86

LIST OF ACRONYMS

BMI	Body Mass Index
COVID-19	Corona Virus Disease 2019
DPT3	Diphtheria-pertussis-tetanus
EAs	Enumeration Areas
IYCF	Infant and Young Child Feeding
MIYCAAN	Maternal Infant Young Child Adolescent and Adult Nutrition
MAD	Minimum Acceptable Diet
MDD	Minimum dietary diversity
MDDW	Minimum Dietary Diversity for Women
MMF	Minimum meal frequency
NDP III	National Development Plan III
NIPN	National Information Platform(s) for Nutrition
ORS	Oral rehydration solutions
SUN	Scaling Up Nutrition
SD	Standard Deviations
SDGs	Sustainable Development Goals
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic and Health Survey
UNHS	Uganda National Household Survey
UNPS	Uganda National Panel Survey
UNAP III	Uganda Nutrition Action Plan
WASH	Water, sanitation, and hygiene
WHO	World Health Organization

EXECUTIVE SUMMARY

This report is a component of the main report of the Uganda National Panel Survey (UNPS) conducted by the Uganda Bureau of Statistics (UBOS). The overall objective of the panel survey is to collect high-quality data on key outcome indicators such as poverty, service delivery, governance, nutrition and employment among others; to monitor the Government's development programmes.

Nutrition status of children

The proportion of children in the panel who are stunted declined from 34% to 25%. The proportion of male children who were severely stunted was almost twice as much as the respective proportion of female children. Stunting was highest in the 12-23 months age group (32.5%). A decline in wasting among children was observed from 4.5% in 2009/10 to 3.2%, the proportion of children who were wasted was higher in urban households (4.3%) compared to rural households (2.8%) in 2019/2020. The proportion of underweight children steadily declined through rounds of the panel from 15.4% in 2009/10 to 7.8% in 2019/20. Overall, 3.1% of children under 5 years old were overweight. The proportion of children who were anaemic increased from 30% in 2018/19 to 44% in 2019/20.



Nutrition status of adults

Almost 3% of adolescents were overweight and 0.5% of adolescent girls were obese in 2019/20. Overall, the proportion of women with anaemia increased from 16% in 2018/19 to 26% in 2019/20. The proportion (30%) of pregnant women that were anaemic was higher than that observed in non-pregnant women and the national average. 9% of women were underweight while 21% were overweight. 18% of men were underweight and 10.3% were overweight. 6.5% of women 8% of men had a raised blood pressure in 2019/20

Maternal, infant, young child, adolescent and adult nutrition

Early initiation of breastfeeding from 83.5% to 81.7% and bottle feeding declined from 15.4%. Only, 11.4% of children received the required minimum dietary diversity and 53.8% received the required meal frequency. Consequently, the proportion of infants/children that meet minimum acceptable diet was a mere 8.0% in 2018/19. Among women of reproductive age (15-49 years) only 11% met the minimum dietary diversity. Vitamin A supplementation coverage was up to 75.8% of children and 5 in 10 of children between 12-59 months were dewormed.

Household meal frequency and food availability



The proportion of households that had only two meals per day including breakfast was **37.5%**

Also, the proportion of households that faced a situation where they didn't have enough food to feed the household in the previous 12 months was **14.1%**

The UNPS findings also revealed that nationally, the highest proportion of food expenditure is towards staple foods

40.8%

Nutrition in child health care

Measles and (Diphtheria-pertussis-tetanus) DPT3 immunization coverage of children aged 12-23 months were at each 95%. The proportion of children under 2 years that had diarrhoea 2 weeks preceding the survey was 11.3%, of these, 48.9% received oral rehydration solutions and zinc for the management of the diarrhoea. 10.6% of the children that had diarrhoea received recommended home fluids. The proportion of children that had a fever was 25.2%, among these, 94.1% had advice or treatment sought for management of the fever. The proportion of children that slept under a mosquito slight reduced 81.2%.

Nutrition in education and sports

The UNPS also collected data on meals provisions at school for school going children (day scholars) aged 6-12 years. The findings revealed that 47.5% and 46.3% of school-going children received meals at schools. The proportion of children that received meals at school was higher among urban households compared to rural households, 58.2% vs 43.8% and 60.1% vs 41.9% in 2018/19 and 2019/20 respectively.

The proportion of children that received meals at school was higher among urban households



Nutrition in water, hygiene and sanitation

The UNPS data revealed an increase in the proportion of household with access to an improved drinking water source from 80.9% to 83.4% in 2018/19 and 2019/20 respectively. The proportion was higher in the urban areas and the Eastern region. The proportion of households whose distance to the nearest water source was less than 200m remained similar between 2018/19 and 2019/20 at 40.9% and 40.2% respectively. The proportion of households whose time to the water source took less than 20 minutes slightly decreased from 66.0% in 2018/19 to 64.6% in 2019/20 respectively. The proportion of households with handwashing facilities that had soap and water reduced from 6.5% to 5%.

“Mothers and babies form an inseparable biological and social unit; the health and nutrition of one group cannot be divorced from the health and nutrition of the other.”

- World Health Organization



01

Introduction

This chapter describes the nature and aim of the survey. It provides an overview of the survey and survey objectives including the approach taken in designing, collecting and processing data for the survey.

1.1 Overview

The Uganda Bureau of Statistics coordinates Uganda's Statistical System and provides quality statistical services that support the country's development processes partly through conducting routine nation-wide surveys. The Uganda National Panel Survey (UNPS) is particularly important for monitoring changes in outcomes and the impact of government policies on indicators of national and international development frameworks to inform policymakers about progress. Monitoring the nutrition of the population is a key government priority and the UNPS has routinely increased its coverage on nutrition-related indicators of interest by various networks. The UNPS provides data on an annual basis that enables tracking of outcome indicators in the Scaling Up Nutrition (SUN) movement, National Development Plan III (NDP III) and Sustainable Development Goals (SDGs), the Uganda Nutrition Action Plan (UNAP III) among others. The data analysed and presented in this report were collected before the advent of the coronavirus pandemic in the country, therefore, subsequent data collection may refer to this report as a baseline before the pandemic. The nutrition report is a component of the UNPS report, and it details the findings of nutrition in households across the country. The survey was conducted before the Corona Virus Disease (COVID) -19 pandemic in the country, as such, the results should be contextualized.

1.2 Survey objectives

The overall objective of the UNPS Program is to collect high-quality data on key outcome indicators such as poverty, service delivery, governance and employment among others; to monitor the government's development programmes like the NDP III among others, on an annual basis.

The specific objectives of the survey are:

- To provide the information required for monitoring the NDP III and other national and

international development objectives.

- To provide high quality nationally representative information on nutrition, income and poverty dynamics at the household level.
- To provide annual data on agriculture to characterize and monitor the performance of the agricultural sector.
- To provide data for the annual compilation of key statistical indicators like the Gross Domestic Product and satellite accounts.

1.3 Scope

The 2018/19 UNPS administered four modules to sampled households to suit the survey's multiple objectives. These included the Socio-economic, Woman; Agriculture and Community modules. These core modules were revised to account for the changing socio-economic environment; though they largely remain the same in every annual survey round to ensure comparability. The details of each of the modules are highlighted below:

1. The Socio-economic module covered a set of core sections which are implemented annually. This module collected information on household background characteristics including domestic tourism, Social Assistance Grant for Empowerment, education and literacy, the health status and health-seeking behaviour of household members, child nutrition and health, labour force status, housing conditions, water and sanitation, energy use, household incomes and non-agricultural household enterprises, household assets, household consumption expenditure, shocks and coping strategies, financial inclusion and welfare indicators.
2. The agriculture module covered households engaged in agricultural activities such as crop and/or livestock production. The questionnaire focused on: land ownership, livestock rearing and farming of main crops. The extensive

agricultural module allows for the annual estimation of land area, both owned and cultivated, as well as production figures for main crops and livestock. Additional information for the characterization of the sector, e.g. irrigation facilities, access to extension services, decision making, and different gender roles were also collected.

3. The Woman module targeted women of reproductive age (15-49 years). It specifically collected information on the use of contraceptives for purposes of measuring the Contraceptive Prevalence Rate, and the unmet need for family planning in Uganda at the time of the survey. The Module also includes information on women's nutrition, mama kit, the place of delivery and assistance during delivery for all births in the last two years.
4. The Community module collected information about the general characteristics of the community, availability and access to community facilities, client satisfaction with the health services provided, education and health infrastructure with a special focus on teacher and health worker absenteeism; as well as works and transport service.

The UNPS also collected information on anthropometric measurements. Samples of salt, oil and fats were taken for measuring food fortification, and blood samples from women (15-49 years) and children (6-59 months) were also drawn for Modified Relative Dose-Response (MRDR) and malaria testing.

1.4 Survey design

The UNPS is carried out over twelve months (a "wave") to accommodate the seasonality associated with the composition of and expenditures on consumption on a nationally representative sample. The survey is conducted in two visits to better capture agricultural outcomes associated with the two cropping seasons of the country. The UNPS, therefore, interviews each

household twice in a year, in visits approximately six months apart.

In 2009/10, the UNPS set out to track and interview 3,123 households that were distributed over 322 Enumeration Areas (EAs), selected out of 783 EAs that had been visited during the Uganda National Household Survey (UNHS) in 2005/06. The distribution of the EAs covered by the 2009/10 UNPS was such that it included all 34 EAs in Kampala District, and 72 EAs (58 rural and 14 urban) in each of the other regions i.e. Central excluding Kampala, Eastern, Western and Northern which make up the strata.

Within each stratum, the EAs were selected with equal probability with implicit stratification by urban/rural and district (in this order). However, the probabilities of selection for the rural portions of ten districts that had been oversampled by the UNHS 2005/06 were adjusted accordingly. Since most Internally Displaced People camps in the Northern region are currently unoccupied, the EAs that constituted IDP camps were not part of the UNPS sample. This allocation allows for reliable estimates at the national, rural-urban and regional levels i.e. at the level of strata representativeness which includes: (i) Kampala City, (ii) Other Urban Areas, (iii) Central Rural, (iv) Eastern Rural, (v) Western Rural, and (vi) Northern Rural.

In the UNPS 2010/11, the concept of Clusters instead of EAs was introduced. A cluster represents a group of households that are within a geographical area up to parish level. This was done due to split-off households that fell outside the selected EAs but could still be reached and interviewed if they still resided within the same parish as the selected EA. Consequently, in each subsequent survey wave, a subset of individuals was selected for tracking (see section 4.1 for details).

In the UNPS 2013/14 (Wave 4) fieldwork, one-third of the initial UNPS sample was refreshed to balance the advantages and shortcomings of panel surveys. Each new household will be

visited for three consecutive waves, while baseline households will have a long history of five or six years, given the start time of the sample refresh.

In the UNPS 2018/19 (Wave VII) and the UNPS 2019/20 (Wave VIII) fieldwork continued with the sample that was selected UNPS 2013/14.

1.5 Tracking

Panel surveys consider tracking as one of the core components to refresh the sample and thereby reducing attrition. Tracking considers the mobility of the target population, the success with which those who move are found and interviewed, and the number of refusals. Tracking was done at both the household and individual level. It aimed at locating members in the locations where they were last interviewed. If core members of a household had since moved, then they were targeted for individual tracking.

1.6 Fieldwork

A centralized approach to data collection was employed whereby nine mobile field teams recruited from the headquarters were dispatched to different sampled areas. Each team comprised of one Supervisor, three Enumerators and one Driver. The teams were recruited based on the languages mostly used in each of the four statistical regions. The field teams visited UNPS households twice in a year to capture seasonality for the households engaged in agricultural activities as well as households' consumption expenditure patterns.

1.7 Data processing and management

The 2018/19 and 2019/20 rounds of UNPS used a computerized system of data collection whereby field staff directly captured information using tablets during data collection. The tablets were loaded with a data entry application with in-built range and consistency checks to ensure good

quality data. Field Team Leaders run checks on the data while still in the field thereafter electronically transmitting it to UBOS Headquarters for verification. Every team was facilitated with an internet modem, a generator and tablets power banks to ensure uninterrupted power supply and internet connectivity while in the field.

1.7.1 Data management system



The households to be covered for the wave were uploaded in the system at the headquarters. The headquarters then assigned the households for that trip to the team leaders who then assigned the households to their respective interviewers. The completed households from the field were sent to the headquarters which are reviewed by a team of office editors for consistency checks. The editors approved validated entries and rejected work which needed clarification from the field teams. The approved work by the editors was exported in Stata format for secondary editing by office staff in preparation for analysis. Nutrition-related data were harmonized and analyzed by Analysis Unit's National Information Platform for Nutrition (NIPN) team.

1.8 Funding

The 2018/19 and 2019/20 rounds seventh wave of the UNPS was conducted with financial support from The United States Agency for International Development (USAID), The United Nations Children's Fund (UNICEF) the Government of Uganda and the World Bank through a Trust Fund from the Bill and Melinda Gates Foundation. The analysis of the data for the Nutrition Situation Report was supported by the European Union (EU) through the National Information Platform for Nutrition.





02

Population Characteristics

Summary of Key Findings

OVERALL,
MOST HOUSEHOLDS
were male headed
64%



Overall, the average panel household size was

5 Persons

in 2019/20 and this is like what it was in 2018/19.

84% of the panel households in 2019/20 lived in owned dwelling units and this was the case in 2018/19 as well

The percentage of
FEMALE
HEADED HOUSEHOLDS
was **higher in urban**
areas than rural areas.

38%  **35%**
URBAN RURAL

The average panel household size in rural areas was
6 PERSONS
compared to
5 PERSONS
in urban areas.

80% of the households used improved water sources in 2019/20 which was an improvement from **75%** in 2015/16.

AMONG THE REGIONS,
Western region had the lowest percentage of female headed households while Kampala had the highest

↓ **31%** WESTERN
↑ **41%** KAMPALA

KAMPALA had the **lowest** AVERAGE HOUSEHOLD SIZE (4 persons) while **Eastern region** had the **highest** (6 persons).

↓ **4 PERSONS** KAMPALA
↑ **6 PERSONS** EASTERN

In 2019/20, **37%** of the households lived in dwelling units made of permanent materials (i.e permanent roof, walls and floor).

2.1 Introduction

Population information is useful for the development and planning of a country. In all waves, the Uganda National Panel Surveys (UNPS) collected information on various characteristics of individuals within the household including age, sex, relationship to the household head, marital status, household composition and size as well as their residence status others. The surveys also collected information on the housing and household characteristics such as ownership of dwelling units, water sources, toilet facilities used, access to electricity, construction materials of dwelling units, etc. as well. This chapter provides a descriptive summary of selected population characteristics of the household population and the housing and household characteristics in the UNPS from the period 2015/16 to 2019/20.

2.2 Characteristics of household heads

A household is a socio-economic unit as well as a unit of enumeration for many demographic and social investigations which is defined as a group of persons who live together and share common housekeeping arrangements. The household may consist of a group of individuals, whether related or not related, or one individual living by himself or herself. A household head is defined as the person who is considered by the household members as the person responsible for day to day running of the household.

Figure 2.1 presents the distribution of households by headship, residence and region. The findings show that, overall, the majority of panel households were male-headed (64%) compared to female-headed (36%). There was a slightly higher percentage of female-headed households in urban areas (38%) compared to rural areas (35%). Kampala region had the highest percentage of female-headed panel households (41%) followed by the Central region (40%) while the Western region had the lowest (31%).

FIGURE 2.2: DISTRIBUTION OF PANEL HOUSEHOLDS BY HEADSHIP, RESIDENCE AND REGION (%)

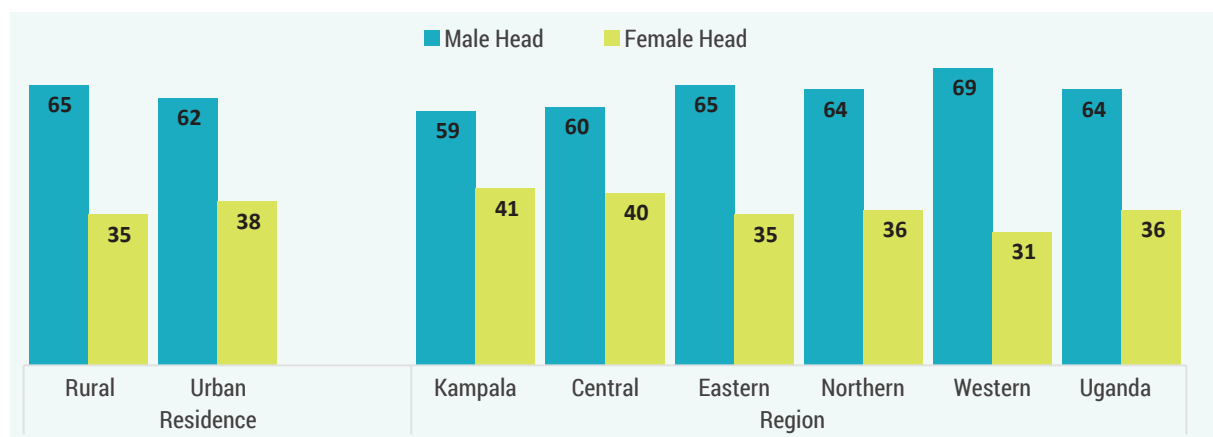
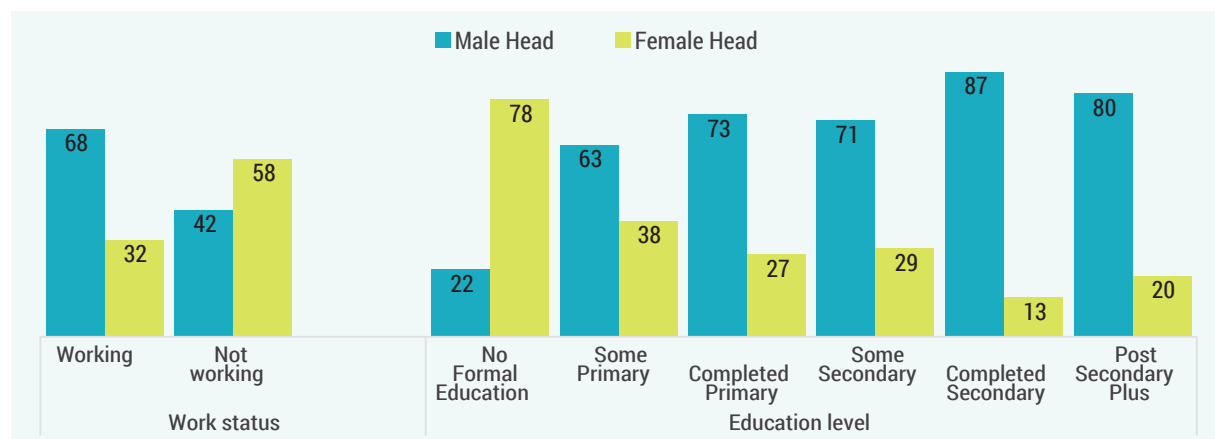


Figure 2.3 presents the distribution of households by headship, education level and work status. The findings show that of the household heads with no formal education, 22 per cent were male while

78 per cent were female. Amongst the household heads that were reportedly not working, 42 per cent were male while 58 per cent were female.

FIGURE 2.3: DISTRIBUTION OF PANEL HOUSEHOLDS BY HEADSHIP, EDUCATION LEVEL AND WORK STATUS (%)



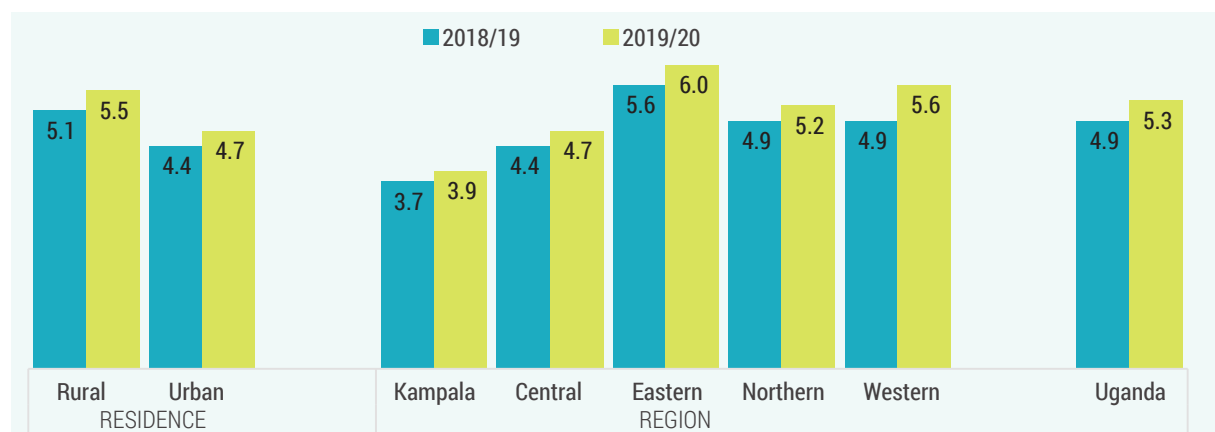
2.3 Average household size

The number of members in a household is a demographic characteristic that can be used to explain population dynamics. Average household size is defined as the average number of persons per household. This number is obtained by dividing the total household population by the total number of households. A change in household size may be brought about by several factors such as births, marriages, partnership splits and the departure of other adults and children in the household. The analysis presented in this section is based on the “de jure” population i.e. persons who usually reside in the household including those temporarily absent at the time of the survey visit.

Figure 2.4 presents the average size of households

in 2018/19 and 2019/20. The findings show that overall, the estimated average panel household size increased from 4.9 persons in 2018/19 to 5.3 persons in 2019/20. Generally, households in rural areas had larger household sizes than households in urban areas between the two survey periods. Across all regions, there was generally an increase in the average household size. Eastern region had the highest average household size in both 2018/19 and 2019/20 (5.6 persons and 6.0 persons respectively) while Kampala had the lowest (3.7 persons and 3.9 persons respectively). There were regional disparities in average household size with Eastern region having the highest (5.6 persons) while Kampala had the lowest in both waves (4.2 and 3.7 persons respectively).

FIGURE 2.4: AVERAGE PANEL HOUSEHOLD SIZE BY RESIDENCE AND REGION



2.4 Marital status of household members

Information on marital status is useful in studying the change in trends of widowhood, marriage practices and the occurrence of under-age marriages. It is also one of the principal factors that influence household size. Uganda's statutory minimum age at marriage is 18 years as stipulated in the Constitution of the Republic of Uganda, 1995. Information on current marital status was collected on panel household members aged 10 years and above. Five categories describing marital status were adopted namely: married monogamously, married (polygamous), divorced/separated, widowed and never married. The

analysis presented in Tables 2.1 and 2.2 below considered only those 12 years and above as well as 18 years and above respectively.

Table 2.1 shows that overall, in 2019/20, 44 per cent of the household population aged 12 years and above had never married and the proportion has been increasing over time from 31 per cent in 2015/16. The trend between the years 2015/16 and 2018/19 shows higher percentages of males than females had never married. However, in 2019/20, a reversal is observed with a higher percentage of females (52%) compared to males (41%). Over time, the proportion of the monogamously married population has decreased from 47 per cent in 2015/16 to 37 per cent in 2019/20.

Table 2.1: Marital status Household members 12 years and above by sex and wave (%)

Marital status	2015/2016			2018/2019			2019/2020		
	Sex			Sex			Sex		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Married Monogamously	42.3	44.5	43.3	34.8	38.8	36.8	14.3	47.4	36.9
Married Polygamous	13.9	10.2	12.1	12.5	8.9	10.7	9.1	8.0	8.3
Divorced / Separated	7.9	3.3	5.7	8.9	3.7	6.4	11.5	2.6	5.5
Widow/Widower	13	2	7.6	12.7	2.3	7.6	13.1	1.2	5.0
Never Married	22.9	39.9	31.2	31	46.2	38.5	52.0	40.7	44.3
Total	100	100	100	100	100	100	100	100	100

Table 2.2: Marital status of Household members 18 years and above by sex and wave (%)

Marital status	2015/2016			2018/2019			2019/2020		
	Sex			Sex			Sex		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Married Monogamously	50.9	60.3	55.2	44.3	52.6	48.3	20.1	62.4	49.6
Married Polygamous	16.8	13.9	15.5	15.9	12.2	14.1	12.8	10.6	11.2
Divorced / Separated	9.6	4.5	7.3	11.3	5.1	8.3	16.2	3.5	7.3
Widow/Widower	15.2	2.3	9.3	16.2	2.8	9.8	18.5	1.6	6.8
Never Married	7.6	19	12.8	12.3	27.3	19.4	32.4	21.9	25.1
Total	100	100	100	100	100	100	100	100	100

2.5 Housing characteristics and conditions



This section presents information on certain characteristics of households including tenure status of dwelling, water sources, type of sanitation facilities, access to electricity and housing conditions. These are important determinants of the health status of household members, particularly children and can also be used as proxy indicators of household socioeconomic status.

2.6 Dwelling and tenure status of Panel households

Information on tenure status was collected by asking the household head the basis on which the household occupied the dwelling they lived in during the three survey periods. Ownership of the dwelling unit represents the security of tenure of the household and a certain degree of social status.

The results show that overall, about 84 per cent of households lived in owned dwellings in 2019/20

and this was more or less similar compared to the previous two survey periods. The trend shows higher percentages of male-headed than female-headed households lived in owned dwellings. It also shows higher percentages of households in rural areas than urban areas lived in owned dwellings. Considering regions, in 2019/20, Eastern region (91%) had the highest percentage of households that owned their dwellings while in the previous two survey periods it was Northern region (92% and 90% respectively).

Housing Conditions

Uganda's Vision 2040 stipulates that social transformation entails access to a decent shelter by the population in both rural and urban settings. Housing is essential for the well-being of mankind and the conditions of the house are important in improving the sanitation status of a household. Also, the construction materials used could be a proxy indicator of the welfare status of a household. (NPA, 2010)

The Uganda National panel survey collects information regarding the housing conditions and the analysis in Table 2.8 categorised construction

Table 2.3: Percentage of Households with own dwelling by selected characteristics

Background characteristics	Households owning the dwelling		
	2015/2016	2018/2019	2019/2020
Sex of Household Head			
Female	82.4	82.6	81.7
Male	85.8	86	85.2
Residence			
Rural	92.5	91.6	91
Urban	68.8	71.3	66.3
Region			
Central	72.8	75.2	73.1
Eastern	89	89	91
Northern	91.9	90.1	89
Western	89.6	88.9	86.8
Uganda	84.6	84.8	83.9

materials as permanent or non-permanent. The findings show that overall, in 2019/20, 80 per cent of panel households had roofs made of permanent materials. There was no variation in the proportions when disaggregated by sex of household head. There was a higher percentage of households that had roofs made of permanent materials in urban (95%) than rural areas (74%). The Central region (97%) followed by the Western region (96%) had the highest percentage of households whose dwellings had roofs made of permanent materials while the Northern region (33%) had the lowest. A similar pattern was noticed for the years 2015/16 and 2018/19; the trend generally shows a similar pattern.

Considering permanent walls, in 2019/20, overall, 69 per cent of panel households had walls made of permanent materials and disaggregation by sex of household head, residence and region showed a similar pattern when across the different survey

periods. Overall, 42 per cent of households in 2019/20 had dwellings with floors made of permanent materials and disaggregation by sex of household head, residence and region also showed a similar pattern when across the different survey periods.

Considering dwellings made of permanent materials (i.e. permanent roof, wall and floor), overall, in 2019/20, 37 per cent of households lived in dwellings made of permanent materials. A higher percentage of female-headed households (40%) than male-headed households (36%) lived in dwellings made of permanent materials in urban (72%) than rural areas (23%). The Central region had the highest percentage of households with dwellings made of permanent materials (62%) while the Northern region had the lowest (20%). Comparison with the previous survey years shows a similar pattern.

Table 2.8: Households with dwellings made of permanent construction materials by background characteristics (%)

	Sex of Household Head		Residence		Region				Total
	Female	Male	Rural	Urban	Central	Eastern	Northern	Western	
Permanent roof									
2015/2016	77.5	74.9	68.9	89.7	95.2	77.5	24.5	92.4	75.8
2018/2019	79.7	78.8	73.5	90.4	96.5	81.2	31.1	95.1	79.1
2019/2020	80.2	79.9	74.1	94.6	96.5	80.8	32.8	96.3	80.0
Permanent wall									
2015/2016	67.1	67.4	58.9	84.1	77.9	65.9	84.7	40.3	67.3
2018/2019	68.9	68.3	59.6	86.3	80.9	65.6	84.3	42	68.5
2019/2020	70.1	69.0	61.5	89.0	82.5	67.7	85.2	43.5	69.4
Permanent floor									
2015/2016	41.8	37.2	21.6	73.4	60	32.2	16.8	36.1	38.8
2018/2019	45.2	40.7	25.8	75.3	65.6	37.3	18.8	36.7	42.3
2019/2020	43.8	40.4	27.7	76.1	64.6	33.4	22.8	36.0	41.6
All permanent									
2015/2016	38.1	34	18.9	68.7	58	30.1	13.6	29.6	35.4
2018/2019	41.2	37.4	22.5	71.2	62.8	34.6	16.7	30	38.7
2019/2020	39.9	36.1	23.2	71.7	61.6	31.6	19.8	27.6	37.2



03

Nutrition Status

Chapter three of the UNPS report focuses on the nutritional status of children, adolescents and adults. It depicts the nutrition outcomes for children under age 5 and infant and young child feeding practices, including breastfeeding and complementary feeding. Data on the prevalence of anaemia among children and adults are also presented, along with relevant aspects of the nutritional status of adolescents, women and men. The chapter also covers findings on high blood pressure, dietary intake practices, supplementation and deworming.

Summary of Key Findings

CHILDREN



1 in 4

children under 5 years
WERE STUNTED



4 IN 10

children under 5 years
WERE ANAEMIC



ALMOST 9%
of children **WERE BORN**
WITH A LOW BIRTH
WEIGHT



3%

of children under 5 years
WERE WASTED



3%

of children under 5 years
WERE OVERWEIGHT

8%

of children under 5 years
WERE UNDERWEIGHT

WOMEN AND MEN

2 IN 10

WOMEN OF
REPRODUCTIVE AGE
(15-49) **were anaemic.**
The highest proportion
of women that were
anaemic was observed
in the Eastern region.

8% of women in the
reproductive age **were**
underweight
and **15%** of women
aged 60 years and above
were underweight.

The proportion of
raised blood pressure
was continently higher
in men compared to
women.

2 IN 10

women **were**
OVERWEIGHT,
the reproductive age
group had the highest
proportion of women
that were overweight in
2019/20.

7.5%
of women **have a raised**
blood pressure.

2 IN 10

MEN **were underweight.**
The highest proportion
of men that were
underweight (27%) was
observed in the Eastern
region.



ALMOST TWICE
as much men were
underweight compared
to women.

IN URBAN
HOUSEHOLDS,
the proportion of men
that **are overweight**
was more than twice as
much as the respective
proportion in rural
households.

The proportion of women
who were obese was
almost five times as
much as the respective
proportion of men

3.1 Nutrition status of children

3.1.1 Stunting

Stunting is impaired growth and development as a result of chronic undernutrition, repeated infection and inadequate mental stimulation among children under 5 years. A child is stunted if their height-for-age is more than two standard deviations (SD) below the WHO Child Growth Standards Median. The causes of stunting are impactful between the first 1000 days after conception up to two years after the birth of a child. Therefore, Maternal Infant Young Child Adolescent and Adult Nutrition (MIYCAAN) is crucial in the reduction of the proportion of stunting in children. Stunting causes delayed mental development and a reduction in intellectual capacity resulting in lower economic productivity in adulthood and poor pregnancy outcomes among affected mothers. The UNPS data showed a continued decline in the proportion of children who are stunted to 34% in 2009/10 to 25% in 2019/20. A proportion that is slightly lower than what was observed during the UDHS 2016 (29.0%). See graphs 3.1.1 and 3.1.1b below and Tables 3.1.1-3.1.4.

- Stunting was higher in male children compared to female children (30.8% Vs 20.2% respectively).
- The proportion of children who were stunted in rural households (28.0%) was higher than those in urban households (15.5%) and the national average (25.0%).
- The Western region had the highest proportion of children who were stunted (33.1%) while the Northern region had the least proportion (22.7%).
- Nine per cent of the children were severely stunted. The proportion of male children who were severely stunted was almost twice as much as the respective proportion of female children (12.8% Vs 6.2%).
- The proportion of children who were stunted was highest in the 12-23 months age group (32.5%).



FIGURE 3.1.1: NATIONAL TRENDS IN STUNTING AMONG CHILDREN IN THE PANEL

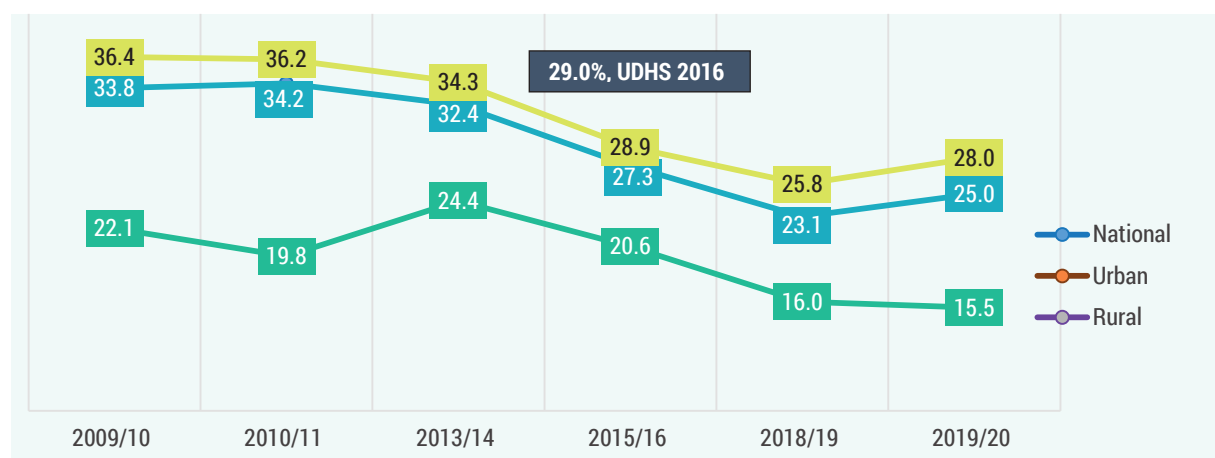
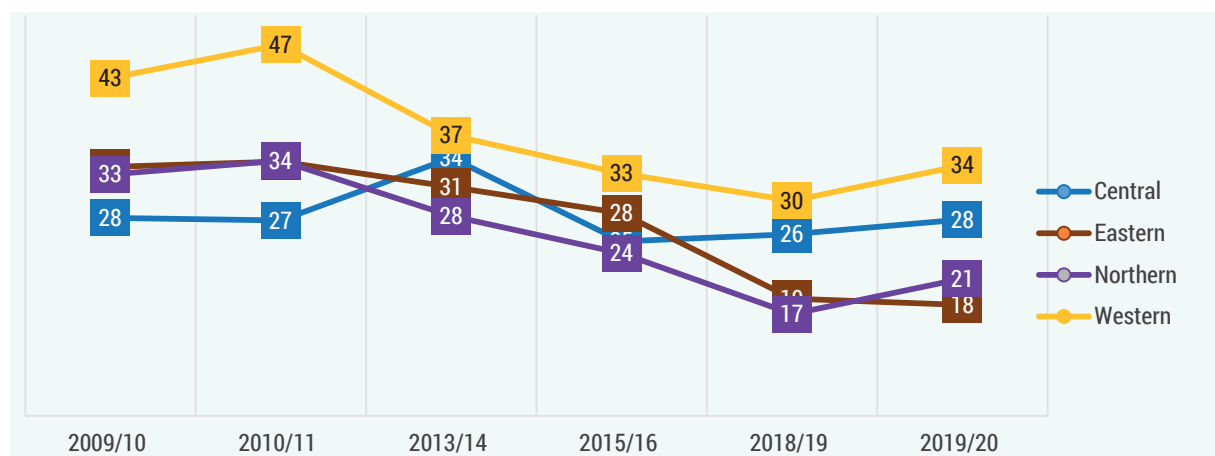


FIGURE 3.1.1B: REGIONAL TRENDS IN STUNTING AMONG CHILDREN IN THE PANEL

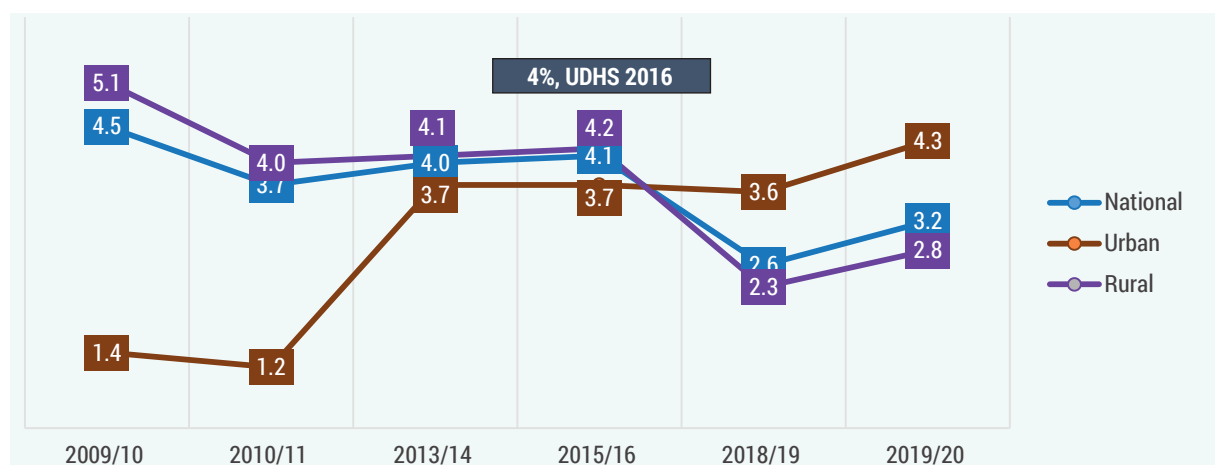


3.1.2 Wasting

Acute undernutrition especially resulting from extreme food shortage or infectious diseases such as diarrhoea can result in wasting or low weight for height. Among children under 5 years, wasting is a strong predictor of mortality. Wasting is established when a child is <-2 standard deviations (SD) of the World Health Organization (WHO) Child Growth Standards median¹. The UNPS revealed a decline in wasting from 4.5% in 2009/10 to 3.2% in 2019/20 which is comparatively lower than what was observed during the UDHS 2016 (4%). See graphs 3.1.2 and 3.1.2b below and Tables 3.1.1-3.1.4.

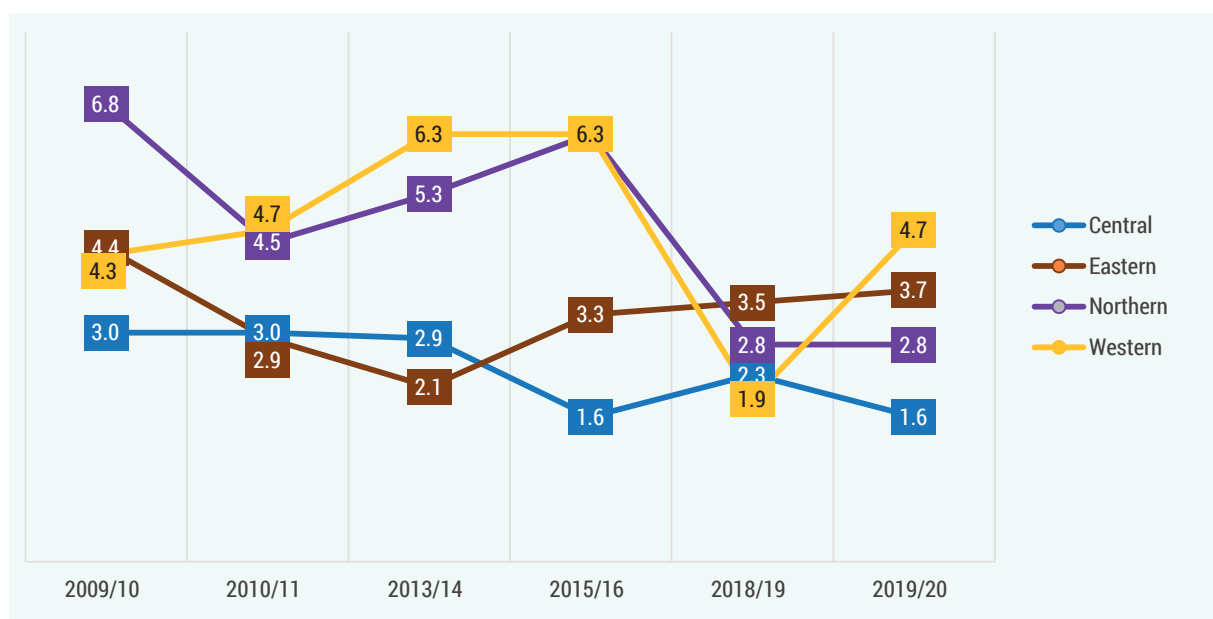
- The proportion of children who were wasted was higher in urban households (4.3%) compared to rural households (2.8%) in 2019/2020.
- Households in the Northern region had the highest proportion of children that were wasted (3.8%) while the Central region had the least proportion (2.4%) in 2019/2020.
- There was an increase in the proportion of children who were wasted in Western Uganda over the past three recent rounds of the panel.

FIGURE 3.1.2: NATIONAL TRENDS IN WASTING AMONG CHILDREN IN THE PANEL



¹ World Health Organization, Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide.

FIGURE 3.1.2B: REGIONAL TRENDS IN WASTING AMONG CHILDREN IN THE PANEL



3.1.3 Underweight

Underweight, a circumstance in which a child has low weight (light) for their age reflects attaining body mass with growth. Underweight is an indicator of both chronic and acute malnutrition and it is established when a child is <-2 standard deviations (SD) of the World Health Organization (WHO) Child Growth Standards median². The UNPS results revealed that nationally, the proportion of underweight children steadily declined through rounds of the panel from 15.4% in 2009/10 to 7.8% in 2019/20, a slightly lower the proportion than that observed in the 2016 UDHS. *See graphs 3.1.3 and 3.1.3b below and Tables 3.1.1-3.1.4.*

- The proportion of male children that were underweight was consistently higher than the

respective proportion of female children (8.5%, 9.8% and 10.0% vs 7.3%, 6.0% and 6.0%) in 2015/16, 2018/19 and 2019/20 respectively. Whereas the proportion of female children that were underweight continually declined within the panel, the respective portion for male children continually increased.

- The proportion of underweight children was highest in the Northern region (8.8%) and least in the Western region (5.4%).
- Households in rural areas had a proportion of underweight children that was consistently higher compared to urban households and the national average during all rounds of the panel.



² World Health Organization, Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide.

FIGURE 3.1.3: NATIONAL TRENDS IN UNDERWEIGHT AMONG CHILDREN IN THE PANEL

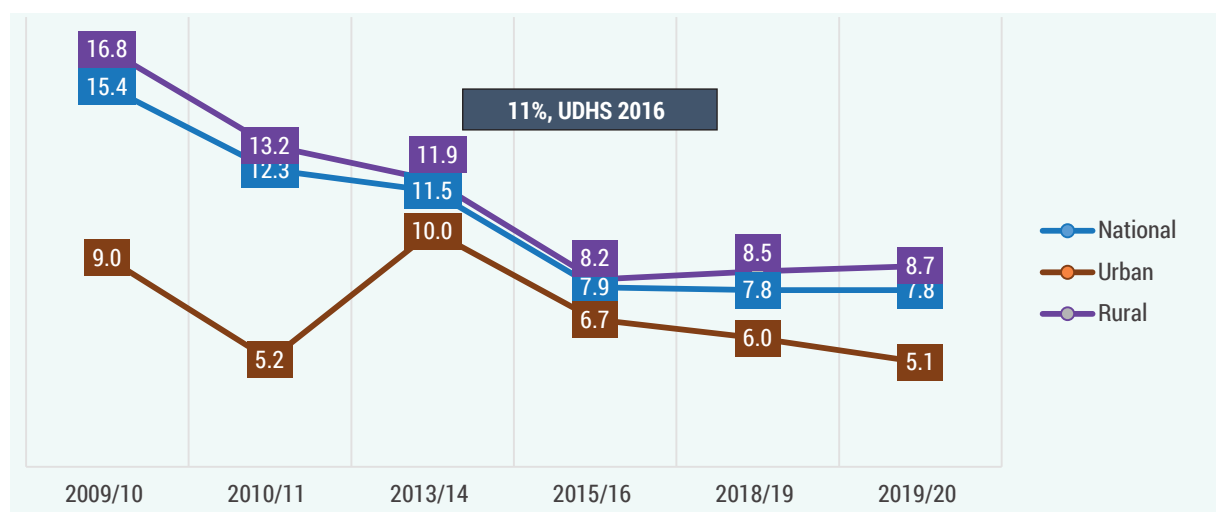
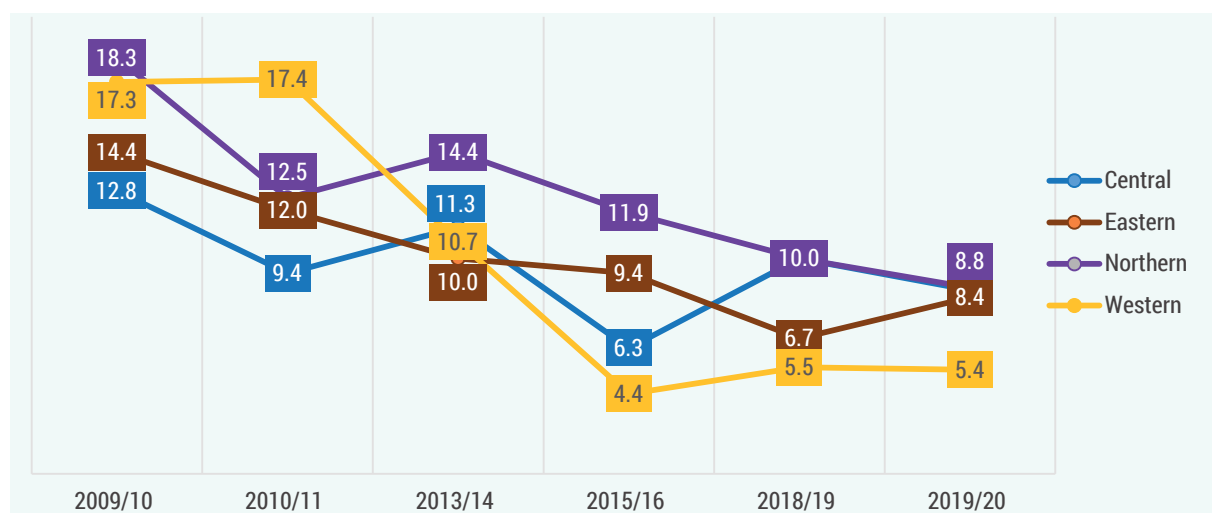


FIGURE 3.1.3B: REGIONAL TRENDS IN UNDERWEIGHT AMONG CHILDREN IN THE PANEL



3.1.4 Overweight

Overnutrition among children can result in high weight for height. Childhood obesity is associated with obesity in adulthood. Obesity increases the risk of non-communicable diseases such as diabetes and can result in disability. The UNPS data showed that, nationally, 3.1% of children under 5 years old were overweight, slightly lower than the observation made during the UDHS in 2016. See graph 3.1.4 below and Tables 3.1.1-3.1.4.

- Households in rural areas consistently had

a higher proportion of children who were overweight through the rounds of the panel.

- The Western region had a consistently higher and increase proportion of children that were overweight. The Northern region had a consistent lower proportion of children who were overweight.
- A decline in the proportion of children who were overweight was observed in the Eastern and Northern regions.

FIGURE 3.1.4: NATIONAL TRENDS IN OVERWEIGHT AMONG CHILDREN IN THE PANEL

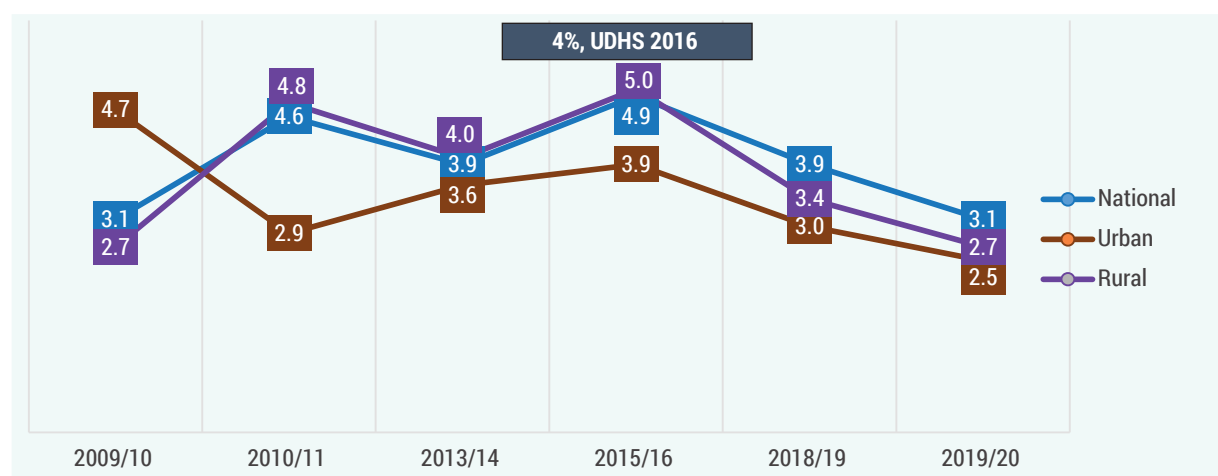
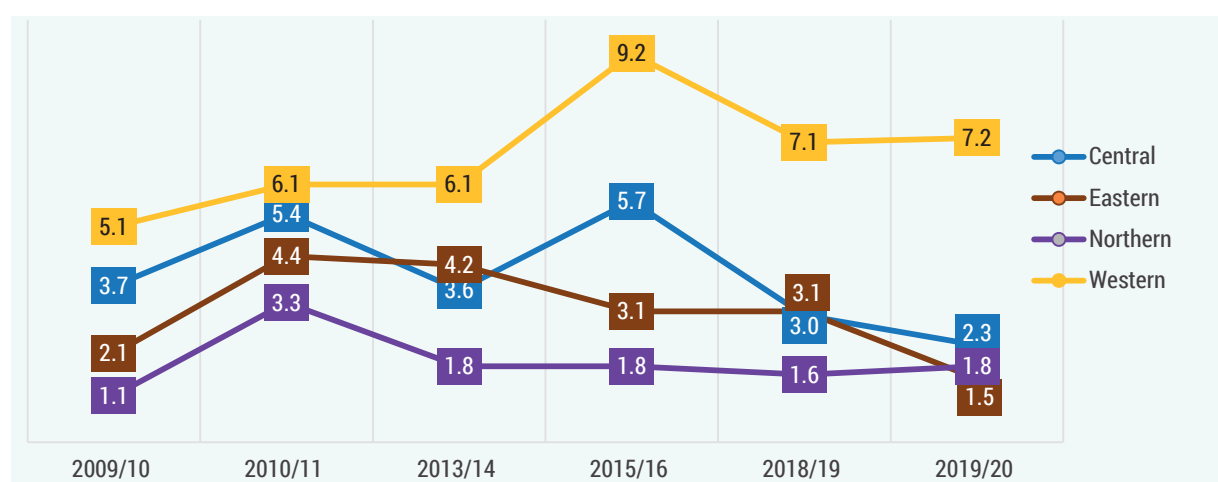


FIGURE 3.1.4B: REGIONAL TRENDS IN OVERWEIGHT AMONG CHILDREN IN THE PANEL



- Comparison between household headship, marital status of the household head and sex of the child did not reveal any consistently significant findings in the panel.

3.1.5 Anaemia

Anaemia, a condition of low haemoglobin in the blood, is one of the causes of death among children below 5 years. Iron deficiency is one of the lead causes of anaemia. Iron is essential for growth and development in children. Low consumption of iron-rich foods reduces the availability of iron in the body leading to anaemia. Starting with the 2018/19 round of the panel, blood samples were collected to test for anaemia. The findings showed

an increase in the proportion of children below 5 years were anaemic from 30% in 2018/19 to 44% in 2019/20. However, the portion is lower than that observed during the UDHS 2016 (54%). See *graphs 3.1.5 and 3.1.5b below and Table 3.1.5*.

- The proportion of children who were anaemic was highest in the Eastern region and lowest in the Central region. An increase in the proportion of children who were anaemic was observed in all regions.
- A slightly lower proportion of children that were anaemic was observed in urban areas. In rural areas, the proportion of children that were anaemic was higher than the national average.

FIGURE 3.1.5: NATIONAL TRENDS IN ANAEMIA AMONG CHILDREN IN THE PANEL

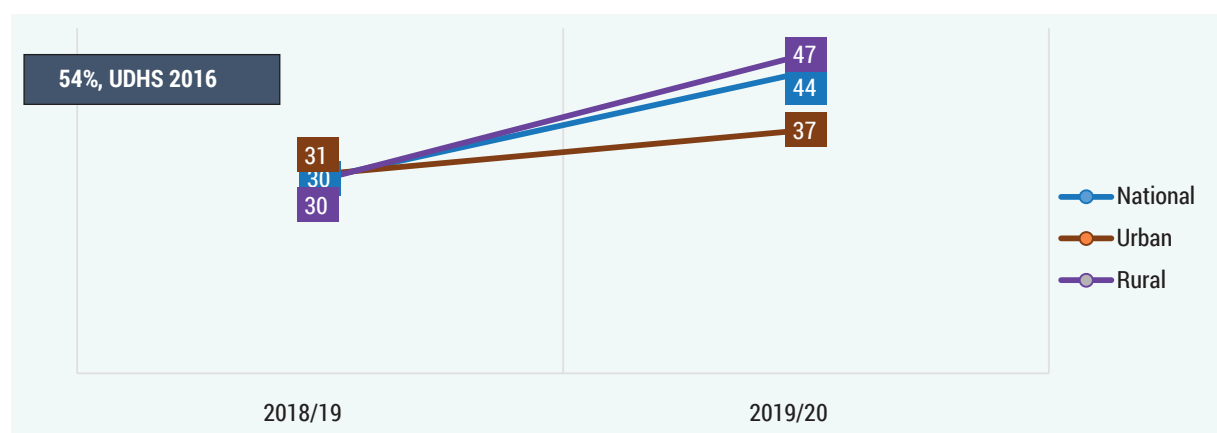
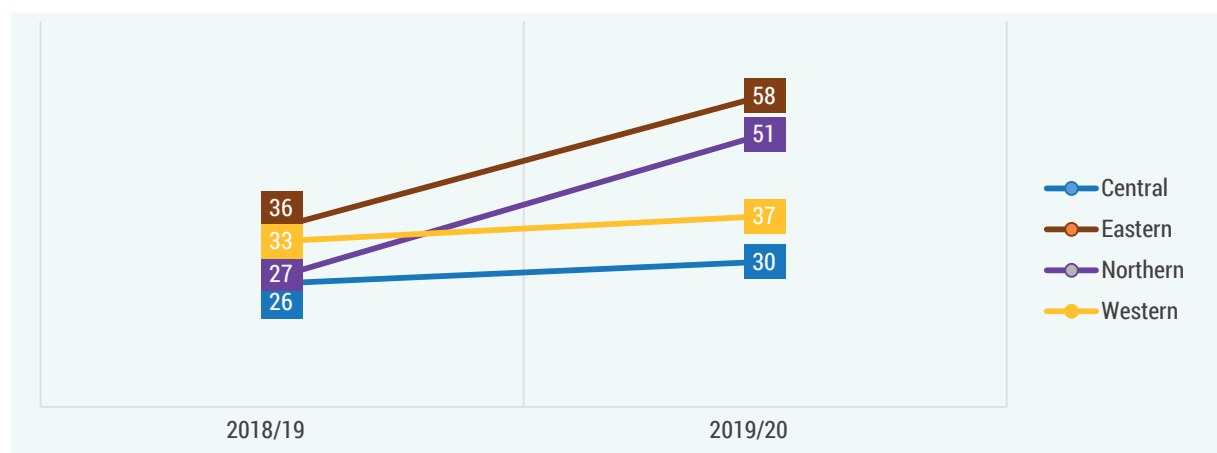


FIGURE 3.1.5B: REGIONAL TRENDS IN ANAEMIA AMONG CHILDREN IN THE PANEL



- In both rounds of the panel, the proportion of children who were anaemic was higher in households where the household heads were married compared to the respective proportion in households where the household heads were not married.
- Severe anaemia was higher among children in male-headed households compared to children in female-headed households.

3.1.6 Low birth weight

Children who are born weighing less than 2.5kg, the average weight for a newborn, is considered to have had a low birth weight. Low birth weight is a predictor of early morbidity and mortality among children within the first few days of life.

Data from the panel survey revealed an increase in the proportion of children who were born with a low birth weight from 4.4% to 8.5%. The proportion observed is less than what was observed during the UDHS 2016 (10%). See *graphs 3.1.6 and 3.1.6b below and Table 3.1.6.*

- Households in rural areas have a proportion of children who were born with low birth weight was higher than the respective proportion in households in urban areas and the national average.
- An increase in the proportion of children with low birth weight was observed in all regions, the Central region had the highest noticeable increase.

FIGURE 3.1.6: NATIONAL TRENDS OF CHILDREN WHO HAD A LOW BIRTH WEIGHT IN THE PANEL

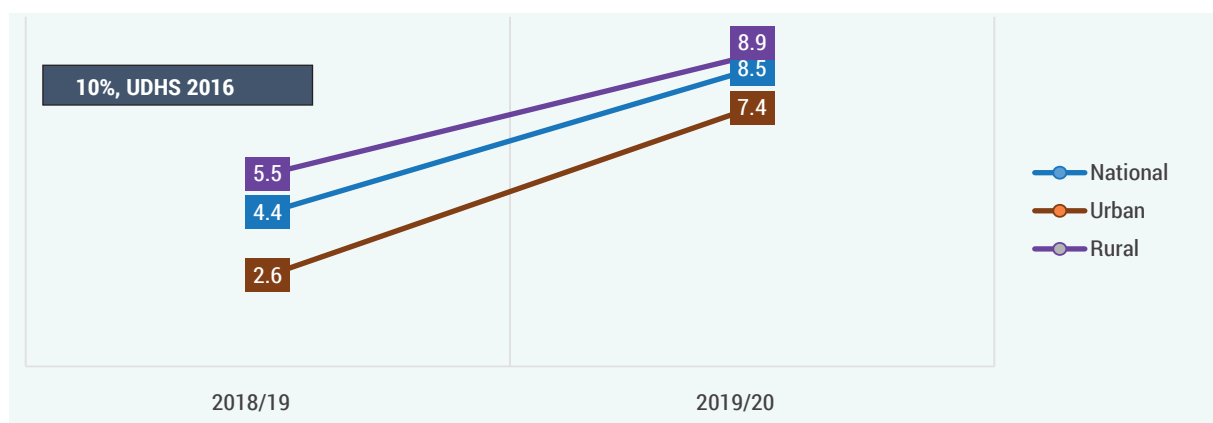
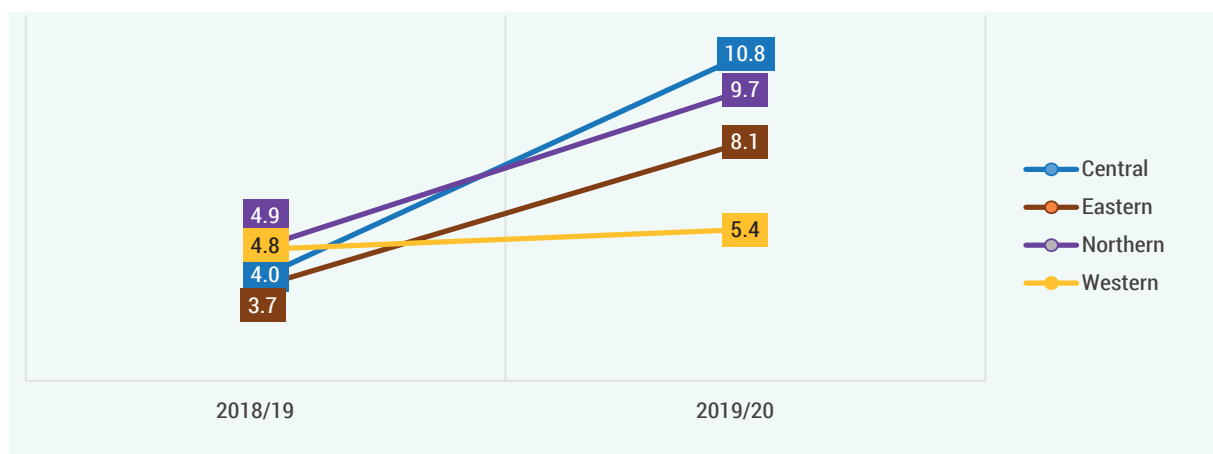


FIGURE 3.1.6B: REGIONAL TRENDS OF CHILDREN WHO HAD A LOW BIRTH WEIGHT IN THE PANEL



3.2 Nutrition status of adolescents

3.2.1 Overweight and obesity

The adolescence stage is the second-fastest development stage of the human body after infancy. The development during this stage requires increases the nutrient requirements of the body. However, over nutrition in adolescents has the same implication on non-communicable diseases in adolescence as in childhood. The UNPS also collected data on calculating the body mass index (BMI) for adolescents (10-19 years) using a cut of 25-29.9 kg/m² for overweight and ≥ 30 kg/m² for obesity. BMI is a measure of thinness or fatness of the body is a measure of body fat based on height and weight, which is a good measure of adolescent nutrition status. BMI in adolescents also helps in the assessment of the future risk of some poor health conditions such as high blood pressure, diabetes, and hypertension. Overall, the UNPS revealed that 2.9% of adolescents were overweight, a proportion that was similar across 2018/19 and 2019/20. Among adolescent girls, there was a slight decline in obesity was seen in between the two rounds of the panel from 0.9% in 2018/19 to 0.5% in 2019/20. See *graph 3.2.1 below*.

3.3 Nutrition status of women



3.3.1 Anaemia

Among women of reproductive age (15-49), anaemia is of public health concern in Uganda and it has an impact of maternal, child health and economic development through low productivity. Anaemia in women can be caused by multiple factors, the iron deficiency being a primary cause. The findings of the UNPS revealed an increase in anaemia nationally from 16% in 2018/19 to 26% in 2019/20. See *graphs 3.3.1 and 3.3.1b below and Table 3.3.1*.

- The proportion (30%) of pregnant women that were anaemic was higher than that observed in non-pregnant women and the national average (26%). This observation has implications on poor childbirth outcomes.
- The proportion of women who were anaemic increased nationally and in all regions between the 2018/19 and 2019/20 rounds of the panel.
- Less than one per cent (0.4%) of the anaemia was severe, however, the proportion of severe anaemia among women was still higher among pregnant women compared to women that were not pregnant.

FIGURE 3.2.1: NATIONAL TRENDS OF ADOLESCENTS WHO WERE OVERWEIGHT AND OBESE IN THE PANEL

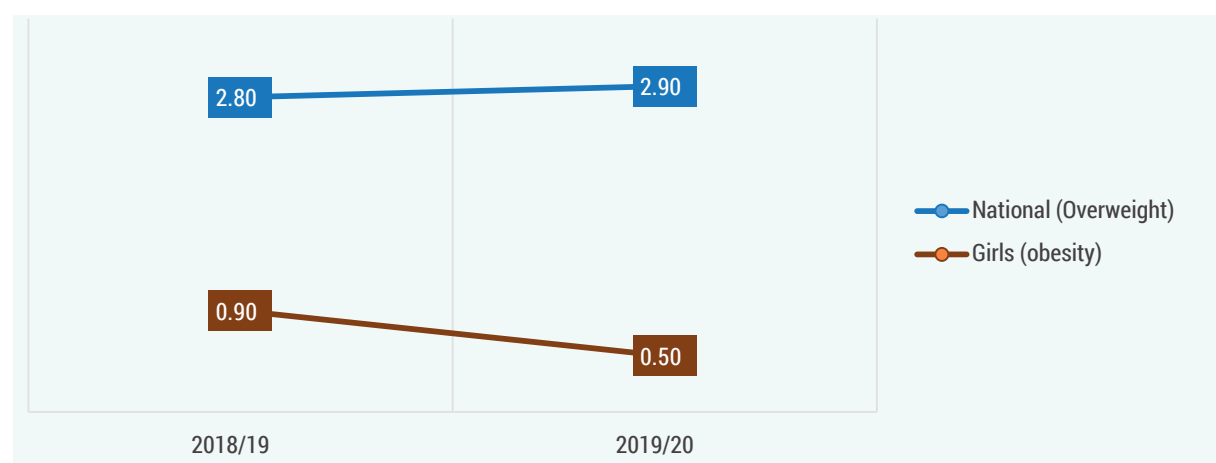


FIGURE 3.3.1: NATIONAL TRENDS IN THE PROPORTION OF WOMEN OF REPRODUCTIVE AGE THAT WERE ANAEMIC

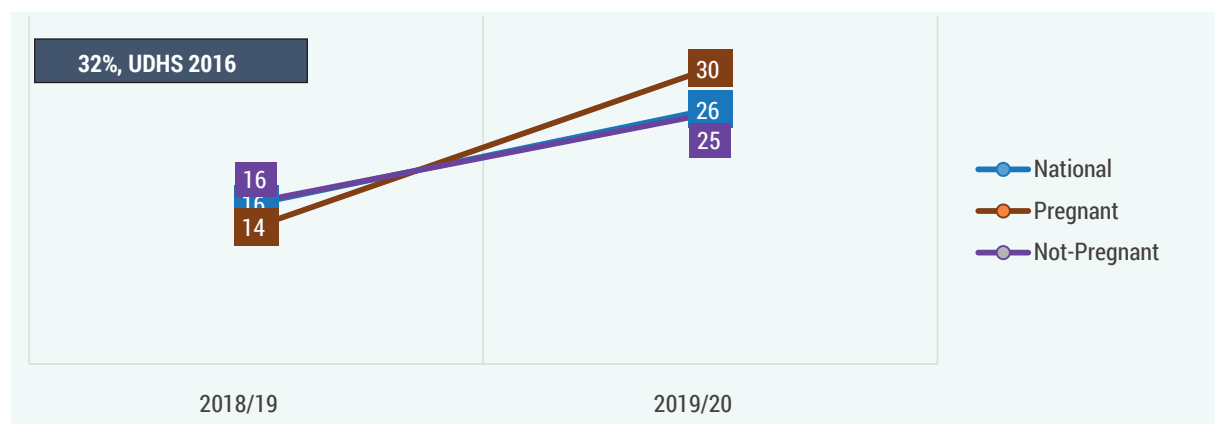
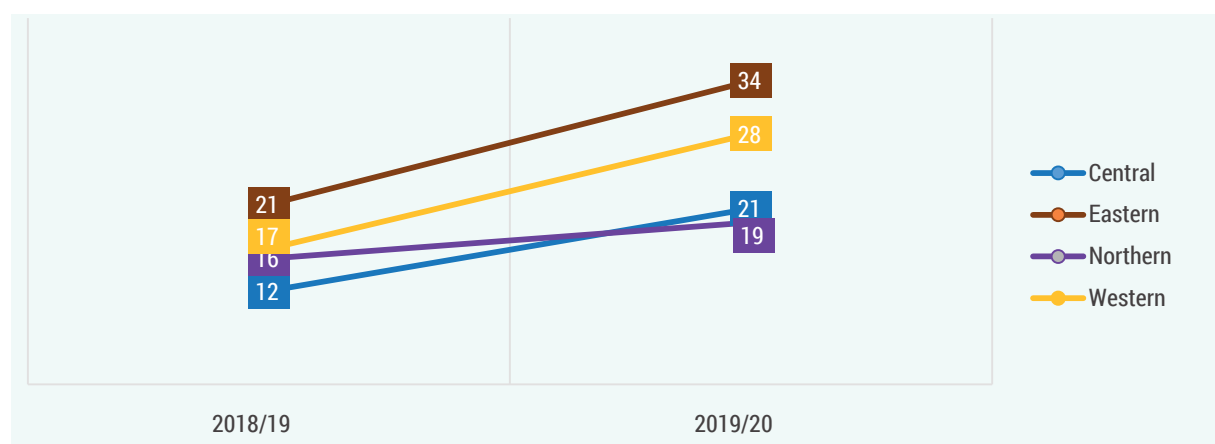


FIGURE 3.3.1B: REGIONAL TRENDS IN THE PROPORTION OF WOMEN OF REPRODUCTIVE AGE THAT WERE ANAEMIC



- The Eastern region consistently had the highest proportion of women that were anaemic, the lowest proportion was observed in the Central and Northern regions.

3.3.2 Underweight

Underweight among women of reproductive age (15-49 years) may lead to poor health outcomes during pregnancy and low birth weight. In the UNPS, underweight was assessed using the BMI cut of less than 18.5 kg/m². Overall, the UNPS revealed that nationally, the proportion of underweight women was about 9% for both the 2018/19 and 2019/20 rounds. See *graphs 3.3.2 and 3.3.2b below and Table 3.3.2.*

- The proportion of underweight women was almost twice as high in rural households compared to urban households (10.5% vs 5.5%).
- The Northern region had the most noticeable increase in the proportion of women that were underweight compared to all other regions.
- By age category, 8% of women in the reproductive age (15-49) were underweight compared to 8% in the 50-59 age group and 15% in the 60 years and above age group.

FIGURE 3.3.2: NATIONAL TRENDS IN THE PROPORTION OF WOMEN OF THAT WERE UNDERWEIGHT

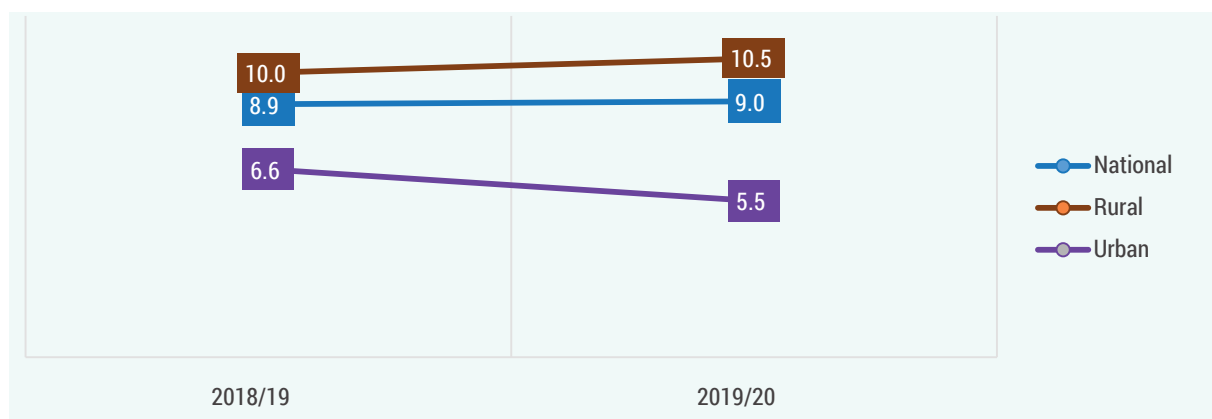
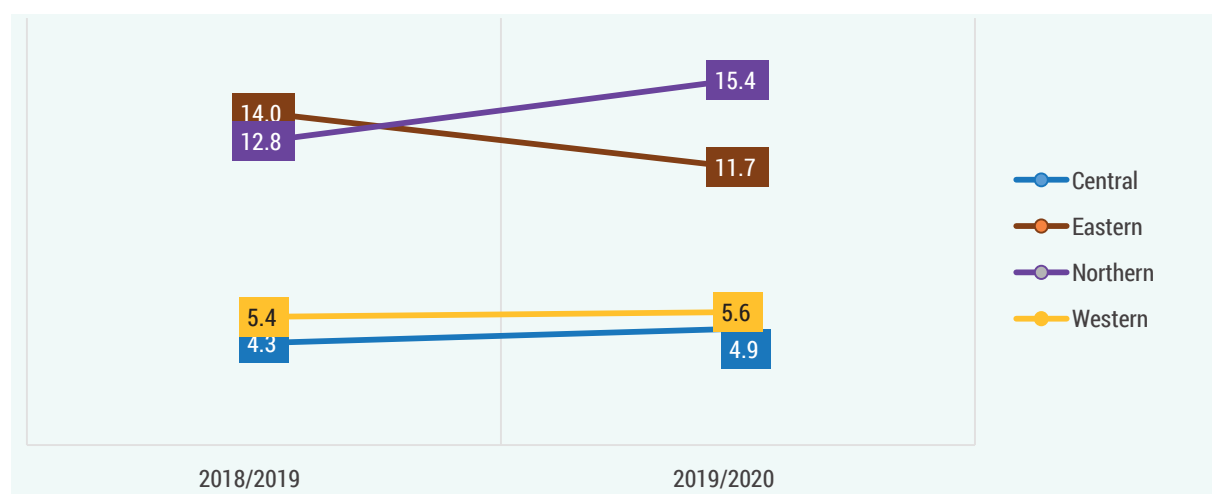


FIGURE 3.3.2B: NATIONAL TRENDS IN THE PROPORTION OF WOMEN THAT WERE UNDERWEIGHT



3.3.3 Overweight

Overnutrition in adulthood has similar consequences as observed in adolescence and childhood. Overweight in women also increases the chances of pregnancy complications and poor childbirth outcomes. The UNPS used a BMI cut of 25-29.9 kg/m² to measure overweight among women. The findings showed that nationally, the proportion of women that were overweight increased between 2018/19 and 2019/20 by one percentage point from 20% to 21%. See *graphs 3.3.3 and 3.3.3b below and Table 3.3.2*.

- Unlike underweight, the proportion of women who were overweight was consistently higher

among women in the urban household compared to women in rural households.

- The Central and Western regions had the highest proportions of women that were overweight. The proportion of women that were overweight in the Northern region had was less than half of the observed national proportion (9% vs 21%).
- The proportion of women of reproductive age that were overweight increased from 20% in 2018/19 to 22% in 2019/20. The reproductive age had the highest proportion of women that were overweight in 2019/20.

FIGURE 3.3.3: NATIONAL TRENDS IN THE PROPORTION OF WOMEN THAT WERE OVERWEIGHT

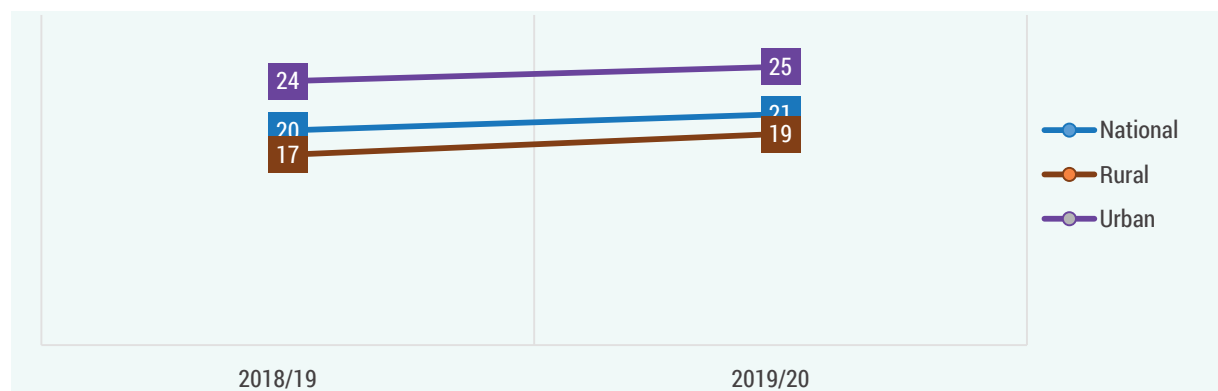
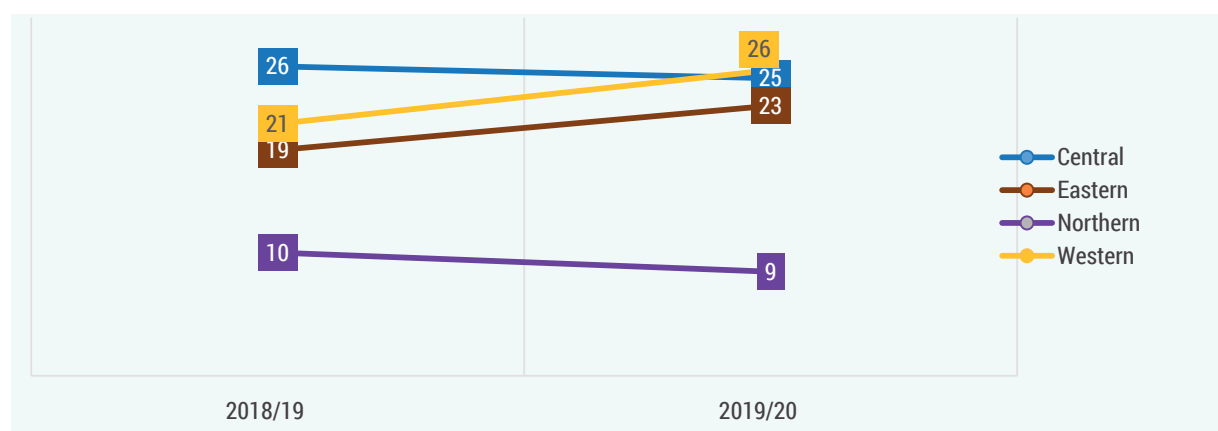


FIGURE 3.3.3B: REGIONAL TRENDS IN THE PROPORTION OF WOMEN THAT WERE OVERWEIGHT



3.3.4 Obesity

A form of overnutrition, usually magnified by a sedentary lifestyle, obesity in women has similar consequences to overweight. The UNPS used a cut BMI of ≥ 30 kg/m² to classify obesity among women. The UNPS data revealed an increase in the proportion of women that were obese from 19% in 2018/19 to 22% in 2019/20. See *graphs 3.3.4 and 3.3.4b below and Table 3.3.2.*

- The proportion of women that were obese was more than twice as much in urban households compared to rural households in both rounds of the panel. Also, the proportion in Urban households was almost twice as much compared to the national average.
- An increase in the proportion of women that were obese was observed in all regions. The Central and Western regions had the highest proportion of women that were obese. The proportion of women that were obese in the northern region was almost half as much as the national average (11.8% Vs 5.7%).
- Seven per cent of the women in the reproductive age were obese, the lowest proportion observed among the categories. In 2019/20 the highest proportion of women that were obese was observed in the 60 years and above age category.

FIGURE 3.3.4: NATIONAL TRENDS IN THE PROPORTION OF WOMEN THAT WERE OBESE

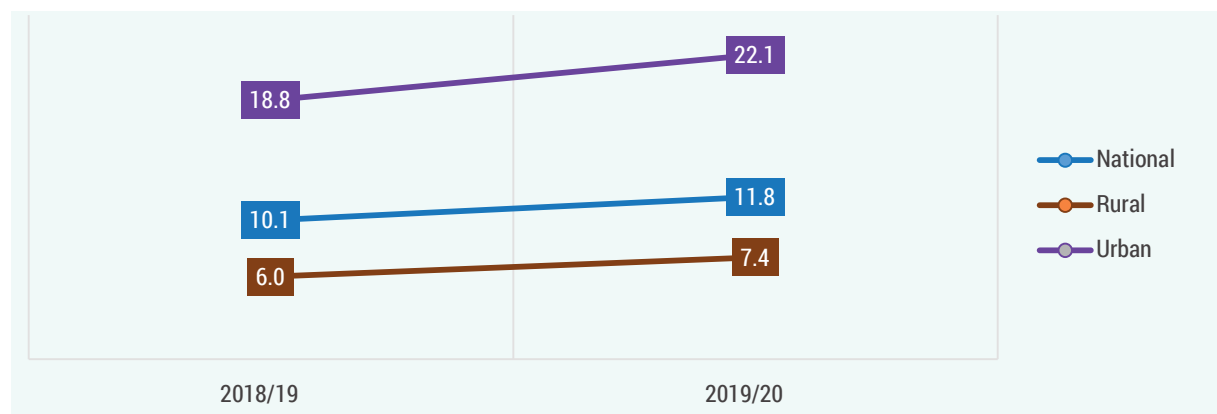
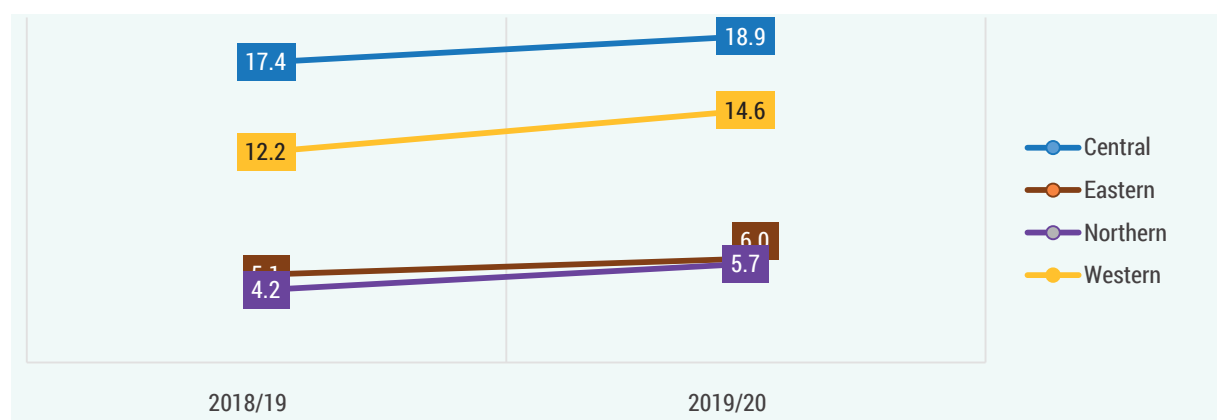


FIGURE 3.3.4B: NATIONAL TRENDS IN THE PROPORTION OF WOMEN THAT WERE OBESE



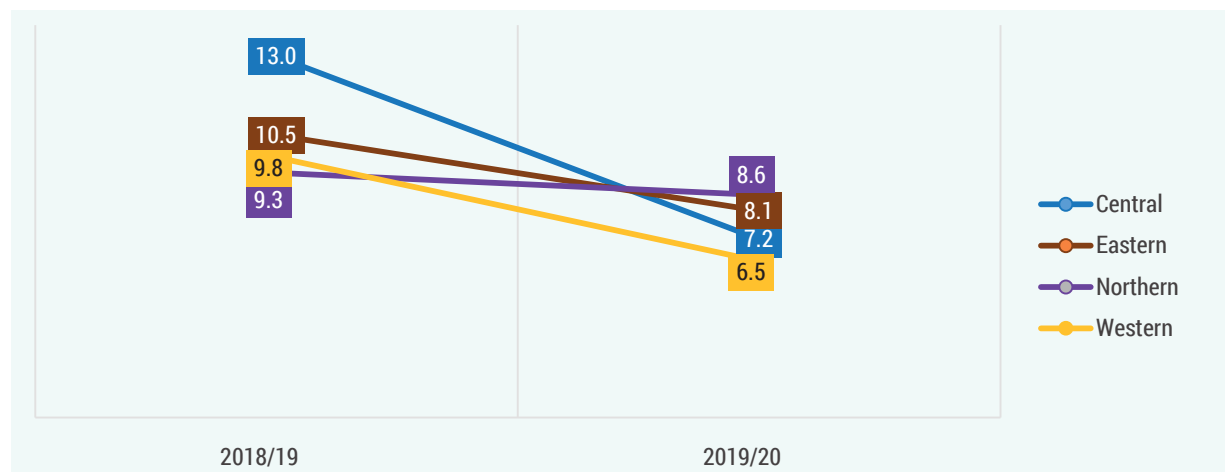
3.3.5 Raised blood pressure

Body mass index, a measure of nutrition status in adults, is strongly associated with hypertension³. Obesity and excessive energy intake are known major causes of hypertension. Consequently, hypertension/raised blood pressure can partly be an indirect measure of the population's nutrition status or secondary consequences of malnutrition. The UNPS considered a systolic blood pressure ≥ 140 and diastolic blood pressure ≥ 90 as raised blood pressure. The UNPS data showed a decline in the proportion of women with a raised blood pressure from 10.1% to 6.5% in 2018/19 and 2019/20 respectively. See *graph 3.3.5 and Table 3.3.3*.

- The proportion of women with raised blood pressure increased in all regions of the country.
- The proportion of women with a raised blood pressure in the Central region declined by almost half between 2018/19 and 2019/20, 13% vs 7.2%.
- Although the Northern region had the highest proportion of women that had a raised blood pressure, the region also had the least proportion of women that were obese.

³ Landi et al., "Body Mass Index Is Strongly Associated with Hypertension."

FIGURE 3.3.5: REGIONAL TRENDS IN THE PROPORTION OF WOMEN THAT HAD A RAISED BLOOD PRESSURE



3.4 Nutrition status of men



3.4.1 Underweight

The UNPS used the same BMI cut off for underweight in men as in women ($<18.5 \text{ kg/m}^2$). The findings showed that nationally, 18% of men were underweight. The proportion of underweight men was higher in rural households compared to urban households or the national average. The Northern region had the highest proportion of men that were underweight, while the Central and Western regions had the least proportion of

men that were underweight. See graphs 3.4.1 and 3.4.1b and Table 3.3.2.

- The proportion of men that were underweight was twice as much as the respective proportion of women for both rounds of the panel (18.3% vs 8.9% and 18.1% vs 9% in 2018/19 and 2019/20 respectively). This implied that men were more prone to being underweight compared to women.
- The proportion of men aged 15-49 that were underweight was much higher than the respective proportion of women in the same age group (17% Vs 8.3%).

FIGURE 3.4.1: NATIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE UNDERWEIGHT

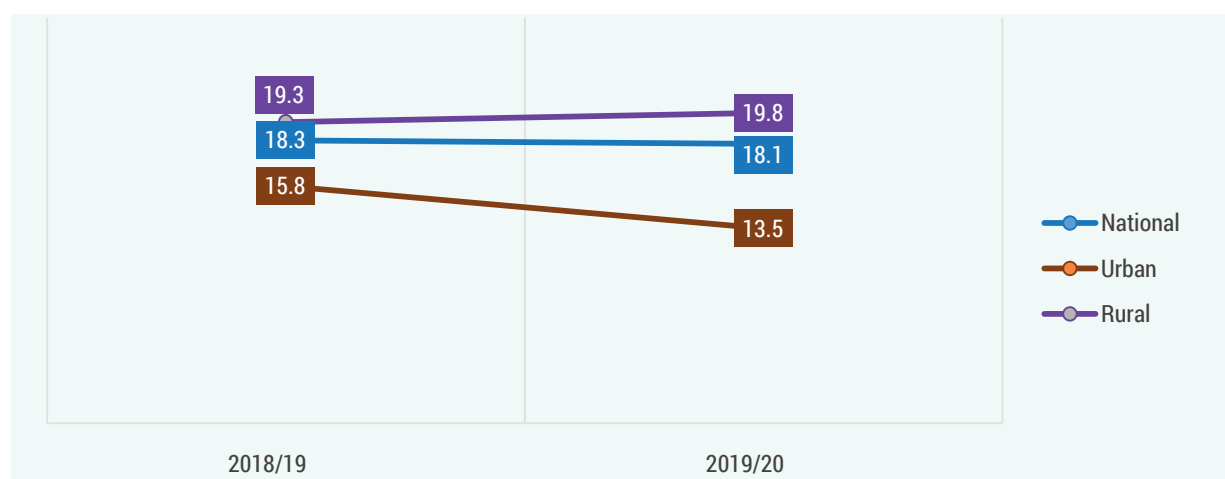
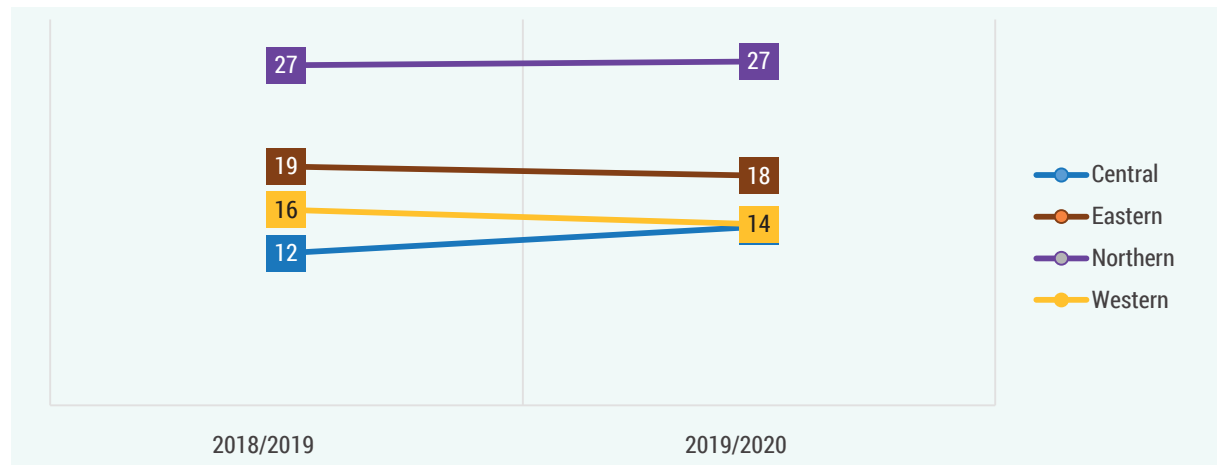


FIGURE 3.4.1B: REGIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE UNDERWEIGHT



3.4.2 Overweight

Similarly, the UNPS used the BMI cut of 25-29.9 kg/m² to measure overweight among men. Although the proportion of men that were underweight remained at 18% between 2018/19 and 2019/2020, the proportion of men that was overweight increased nationally from 8.9% to 10.3%. In urban households, the proportion of men that are overweight was more than twice as much as the respective proportion in rural households.

See graphs 3.4.2 and 3.4.2b and Table 3.3.2.

- The proportion of women that were overweight was more than twice as much as the respective proportion of men during both rounds of the panel (19.5% vs 8.9% and 21% vs 10.3% in 2018/19 and 2019/20 respectively).
- Whereas men were more prone to undernutrition (underweight), women were more prone to overnutrition (overweight).

FIGURE 3.4.2: NATIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE OVERWEIGHT

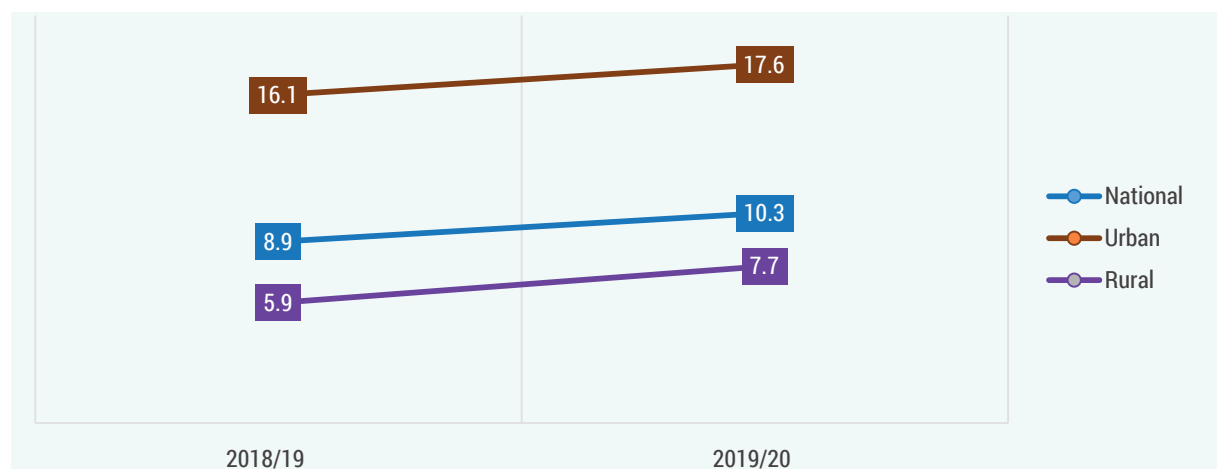
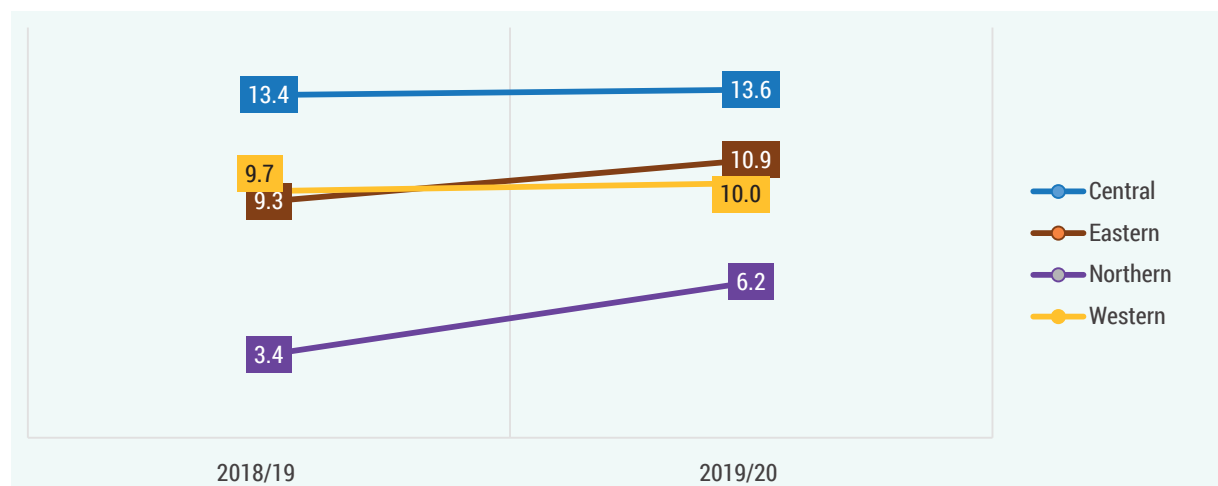


FIGURE 3.4.2B: REGIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE OVERWEIGHT



3.4.3 Obesity

Using the same BMI cut off for women (≥ 30 kg/m²) the UNPS findings revealed an almost two-fold increase in the proportion of men that were obese from 1.7% in 2018/19 to 2.3% in 2019/20. The increase was attributed to a rise in the proportion of men that were obese in urban households. See *graphs 3.4.3 and 3.4.3b and Table 3.3.2*.

- The proportion of men who were obese in rural households remained consistent between 2018/19 and 2019/20 at 1.5%.
- The Western region had the most noticeable increase in the proportion of men that were obese between the panel rounds from 1.5% in 2018/19 to 3.5% in 2019/20.
- The proportion of women who were obese was almost five times as much as the respective proportion of men in both panel rounds, 10.1% vs 1.7% and 11.8% vs 2.3% in 2018/19 and 2019/20 respectively.

FIGURE 3.4.3: NATIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE OBESE

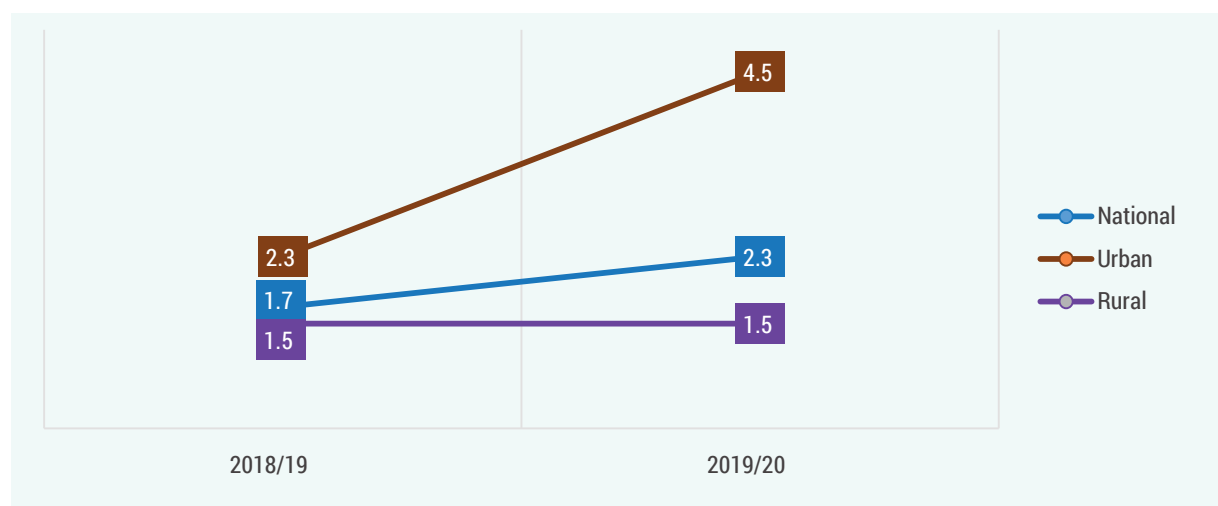
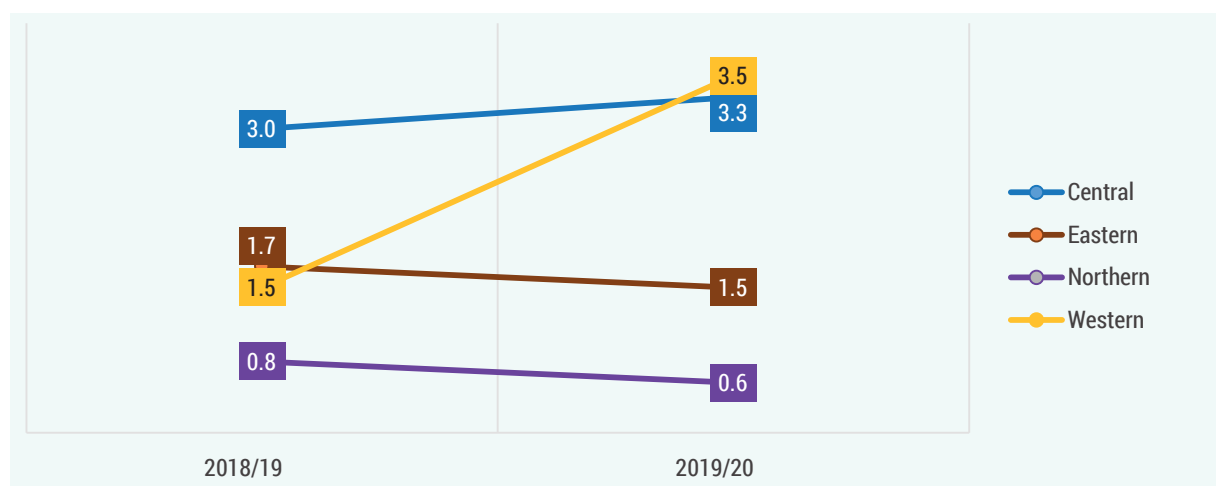


FIGURE 3.4.3B: REGIONAL TRENDS IN THE PROPORTION OF MEN THAT WERE OBESE

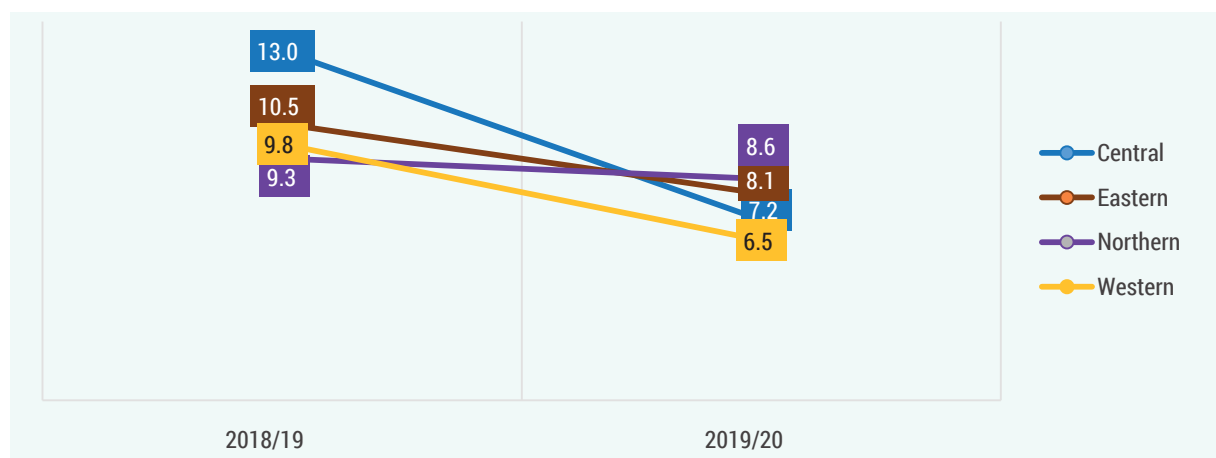


3.4.4 Raised blood pressure

Using the same categorization of raised blood pressure used in women (systolic ≥ 140 and diastolic ≥ 90), the UNPS data revealed a slight decline in raised blood pressure among men from 11% in 2018/19 to 8% in 2019/20. See graph 3.4.4 and Table 3.3.3.

- Although the Central region had the highest proportion of men with a raised blood pressure (13%) in 2018/19, the Northern region had the highest proportion of men with a raised blood pressure in 2019/20.
- The proportion of raised blood pressure was continentally higher in men compared to women during both rounds of the UNPS, 11.8% vs 10.1% and 9.2% vs 6.5% in 2018/19 and 2019/20 respectively. This is despite the proportions of obesity and overweight being much higher among men than women.
- The proportion of men with raised blood pressure was higher than the national proportion of both men and women with raised blood pressure. Raised blood pressure was much higher in men aged 60 years and above.

FIGURE 3.4.4: REGIONAL TRENDS IN THE PROPORTION OF MEN WITH A RAISED BLOOD PRESSURE



LIST OF TABLES

Table 3.1.1: The proportion of children under age 5 classified as malnourished according to three anthropometric indices: height-for-age, weight-for-height, and weight-for-age, according to residence and region, uganda national panel surveys from 2009 to 2020

Disaggregation		Stunting (Height-for-Age)		Wasting (Weight-for-Height)		Underweight (Weight-for-Age)		Overweight (Weight-for-Height)	
Year		% below -2SD	Number of children	% below -2SD	Number of children	% below -2SD	Number of children	% above +2SD	Number of children
2009/2010	Geographical regions								
	Central	27.7	549	3.0	542	12.8	549	3.7	542
	Eastern	33.3	527	4.4	523	14.4	525	2.1	523
	Northern	32.5	536	6.8	533	18.3	538	1.1	533
	Western	43.1	414	4.3	404	17.3	408	5.1	404
	Residence								
	Urban	22.1	377	1.4	371	9.0	375	4.7	371
	Rural	36.4	1649	5.1	1631	16.8	1645	2.7	1631
	Total	33.8	2026	4.5	2002	15.4	2020	3.1	2002
2010/2011	Geographical regions								
	Central	27.4	505	3.0	507	9.4	509	5.4	507
	Eastern	33.9	448	2.9	445	12.0	448	4.4	445
	Northern	34.0	485	4.5	480	12.5	481	3.3	480
	Western	46.8	220	4.7	204	17.4	208	6.1	204
	Residence								
	Urban	19.8	275	1.2	274	5.2	275	2.9	274
	Rural	36.2	1383	4.0	1362	13.2	1371	4.8	1362
	Total	34.2	1658	3.7	1636	12.3	1646	4.6	1636
2013/2014	Geographical regions								
	Central	34.3	405	2.9	401	11.3	407	3.6	401
	Eastern	31.1	492	2.1	489	10.0	494	4.2	489
	Northern	27.9	474	5.3	469	14.4	472	1.8	469
	Western	36.8	316	6.3	319	10.7	324	6.1	319
	Residence								
	Urban	24.4	319	3.7	319	10.0	322	3.6	319
	Rural	34.3	1368	4.1	1359	11.9	1375	4.0	1359
	Total	32.4	1687	4.0	1678	11.5	1697	3.9	1678

Disaggregation		Stunting (Height-for-Age)		Wasting (Weight-for-Height)		Underweight (Weight-for-Age)		Overweight (Weight-for-Height)	
Year		% below -2SD	Number of children	% below -2SD	Number of children	% below -2SD	Number of children	% above +2SD	Number of children
2015/2016	Geographical regions								
	Central	25.1	329	1.6	329	6.3	330	5.7	329
	Eastern	28.2	366	3.3	368	9.4	368	3.1	368
	Northern	23.8	383	6.3	384	11.9	384	1.8	384
	Western	32.6	229	6.3	228	4.4	232	9.2	228
	Residence								
	Urban	20.6	251	3.7	251	6.7	252	3.9	251
	Rural	28.9	1056	4.2	1058	8.2	1062	5.1	1058
	Total	27.3	1307	4.1	1309	7.9	1314	4.9	1309
2018/2019	Geographical regions								
	Central	25.9	396	2.3	393	10.0	405	3.0	393
	Eastern	18.8	538	3.5	534	6.7	544	3.1	534
	Northern	17.1	551	2.8	547	10.0	554	1.6	547
	Western	29.6	456	1.9	447	5.5	460	7.1	447
	Residence								
	Urban	16.0	395	3.6	390	6.0	400	6.0	390
	Rural	25.8	1546	2.3	1531	8.5	1563	3.1	1531
	Total	23.1	1941	2.6	1921	7.8	1963	3.9	1921
2019/2020	Geographical regions								
	Central	27.5	327	1.6	325	8.7	331	2.3	325
	Eastern	18.1	486	3.7	473	8.4	477	1.5	473
	Northern	21.0	476	2.8	467	8.8	475	1.8	467
	Western	33.5	339	4.7	324	5.4	335	7.2	324
	Residence								
	Urban	15.5	290	4.3	285	5.1	290	4.0	285
	Rural	28.0	1338	2.8	1304	8.7	1328	2.9	1304
	Total	25.0	1628	3.2	1589	7.8	1618	3.1	1589

Table 3.1.2: The proportion of children under age 5 classified as stunted according to the anthropometric index of nutritional status: height-for-age, according to background characteristics, Uganda National Panel Surveys 2015/2016, 2018/2019 and 2019/2020

Height –for- Age												
Background characteristics	2015/2016				2018/2019				2019/2020			
	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children
Child's age in months												
0-11	1.0	5.0	-0.7	16	3.1	14.1	-0.5	262	1.8	16.5	-0.5	162
12-23	10.2	32.2	-1.1	215	10.5	27.4	-1.3	378	12.5	32.5	-1.4	350
24-35	7.9	27.9	-1.2	346	9.3	26.9	-1.4	434	12.1	29.1	-1.4	360
36-47	9.0	28.5	-1.3	374	8.8	25.8	-1.3	418	7.7	20.8	-1.2	341
48-59	7.2	23.6	-1.3	356	4.8	18.8	-1.0	449	7.6	21.2	-1.1	415
Child's Sex												
Male	10.5	29.8	-1.3	628	11.0	30.7	-1.3	937	12.8	30.8	-1.4	802
Female	6.3	25.0	-1.1	679	4.5	16.4	-1.0	1004	6.2	20.2	-1.1	826
Sex of the household head												
Male	7.4	26.1	-1.1	1001	6.8	23.7	-1.2	1445	8.1	25.2	-1.2	1198
Female	11.1	31.1	-1.4	295	9.8	21.5	-1.1	494	12.2	24.4	-1.3	430
Marital status of the household head												
Married	8.4	27.1	-1.2	1139	7.8	23.4	-1.1	1711	9.4	25.5	-1.2	1446
Not Married	6.9	27.9	-1.6	157	5.9	21.5	-1.2	227	7.0	20.6	-1.2	182
Residence												
Urban	6.3	20.6	-1.0	251	4.1	16.0	-0.8	395	5.7	15.5	-0.8	290
Rural	8.8	28.9	-1.2	1056	8.8	25.8	-1.3	1546	10.3	28.0	-1.3	1338
Geographical regions												
Central	6.8	25.1	-1.1	329	7.6	25.9	-1.2	396	11.2	27.5	-1.3	327
Eastern	7.7	28.2	-1.2	366	5.4	18.8	-1.0	538	5.7	18.1	-1.1	486
Northern	8.0	23.8	-1.2	383	5.3	17.1	-1.0	551	7.2	21.0	-1.1	476
Western	11.6	32.6	-1.5	229	11.3	29.6	-1.3	456	12.7	33.5	-1.3	339
Total	8.3	27.3	-1.2	1307	7.5	23.1	-1.1	1941	9.2	25.0	-1.2	1628

Table 3.1.3: The proportion of children under age 5 classified as wasted or overweight according to the anthropometric index of nutritional status: weight-for-height, according to background characteristics, Uganda National Panel Surveys 2015/2016, 2018/2019 and 2019/2020

Weight –for- Height															
Background characteristics	2015/2016					2018/2019					2019/2020				
	% below -3 SD	% below -2 SD	% above +2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	% above +2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	% above +2 SD	Mean Z-score (SD)	Number of children
Child's age in months															
0-11	0.0	5.8	10.8	-0.1	16	1.6	6.5	12.3	0.1	262	1.1	6.3	8.6	-0.1	159
12-23	1.4	4.6	13.3	0.4	216	1.6	3.1	2.4	0.0	374	3.4	7.1	3.1	-0.0	341
24-35	1.4	3.6	4.6	0.2	347	0.6	2.1	2.2	0.2	431	0.5	2.2	1.5	0.2	351
36-47	0.7	3.7	3.7	0.0	375	0.1	0.7	1.6	0.3	411	0.0	1.6	4.2	0.2	332
48-59	1.0	4.6	1.5	-0.1	355	0.0	2.1	2.4	0.1	443	0.1	0.5	1.6	0.0	406
Child's Sex															
Male	1.0	3.6	4.4	0.2	629	0.5	1.9	5.8	0.2	928	0.9	2.7	4.9	0.2	777
Female	1.1	4.5	5.3	0.0	680	0.9	3.3	2.1	0.0	993	1.1	3.6	1.8	0.0	812
Sex of the household head															
Male	1.0	3.5	5.1	0.1	1004	0.9	2.9	3.7	0.1	1427	1.2	3.8	2.9	0.1	1179
Female	1.4	5.4	4.0	-0.0	294	0.3	1.8	4.4	0.2	492	0.6	1.4	3.9	0.1	410
Marital status of the household head															
Married	1.1	4.1	5.0	0.1	1141	3.7	0.8	2.9	0.1	1694	1.0	3.3	2.9	0.1	1413
Not Married	0.7	3.1	4.0	-0.0	157	4.7	0.0	0.7	0.3	224	1.1	2.1	5.5	0.2	176
Residence															
Urban	1.0	3.7	3.9	0.1	251	1.3	3.6	6.0	0.1	390	1.4	4.3	4.0	0.1	285
Rural	1.1	4.2	5.1	0.1	1058	0.5	2.3	3.1	0.1	1531	0.9	2.8	2.9	0.1	1304
Geographical regions															
Central	0.5	1.6	5.7	0.2	329	0.3	2.3	3.0	0.1	393	0.2	1.6	2.3	0.1	325
Eastern	1.1	3.3	3.1	0.1	368	1.6	3.5	3.1	0.0	534	1.8	3.7	1.5	-0.1	473
Northern	1.0	6.3	1.8	-0.2	384	0.2	2.8	1.6	-0.1	547	0.8	2.8	1.8	-0.1	467
Western	2.0	6.3	9.2	0.3	228	0.6	1.9	7.1	0.4	447	1.3	4.7	7.2	0.4	324
Total	1.1	4.1	4.9	0.1	1309	0.7	2.6	3.9	0.1	1921	1.0	3.2	3.1	0.1	1589

Table 3.1.4: The proportion of children under age 5 classified as underweight according to the anthropometric index of nutritional status: weight-for-age, according to background characteristics, Uganda National Panel Surveys 2015/2016, 2018/2019 and 2019/2020

Background characteristics	Weight-for-Age (WAZ Scores)											
	2015/2016				2018/2019				2019/2020			
	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children	% below -3 SD	% below -2 SD	Mean Z-score (SD)	Number of children
Child's age in months												
0-11	1.0	5.7	0.2	16	2.5	8.0	-0.2	289	1.3	6.9	-0.3	170
12-23	1.3	5.7	-0.2	219	2.9	9.7	-0.6	376	4.3	9.4	-0.7	347
24-35	1.0	6.4	-0.5	347	1.6	5.8	-0.6	436	2.7	9.1	-0.6	355
36-47	2.2	9.6	-0.7	376	0.3	7.3	-0.6	415	0.3	6.8	-0.6	335
48-59	1.4	8.8	-0.8	356	1.8	8.6	-0.6	447	0.2	6.6	-0.6	411
Child's Sex												
Male	1.9	8.5	-0.6	633	1.4	9.8	-0.5	951	1.9	10.1	-0.7	794
Female	1.1	7.3	-0.6	681	2.1	6.0	-0.6	1012	1.8	6.0	-0.6	824
Sex of the household head												
Male	1.5	6.9	-0.6	1007	1.7	7.5	-0.6	1458	2.0	8.5	-0.6	1193
Female	1.2	11.2	-0.7	296	2.0	8.8	-0.5	503	1.5	6.0	-0.6	425
Marital status of the household head												
Married	1.6	7.7	-0.6	1145	2.0	7.9	-0.6	1734	1.9	8.4	-0.6	1441
Not Married	0.0	8.3	-0.8	158	0.3	7.5	-0.4	226	1.4	2.5	-0.5	177
Residence												
Urban	1.4	6.7	-0.5	252	1.9	6.0	-0.3	400	1.4	5.1	-0.4	290
Rural	1.5	8.2	-0.6	1062	1.7	8.5	-0.6	1563	2.0	8.7	-0.7	1328
Geographical regions												
Central	0.4	6.3	-0.5	330	1.3	10.0	-0.6	405	1.0	8.7	-0.6	331
Eastern	2.3	9.4	-0.6	368	2.3	6.7	-0.6	544	2.7	8.4	-0.7	477
Northern	1.6	11.9	-0.8	384	1.6	10.0	-0.6	554	2.4	8.8	-0.7	475
Western	1.9	4.4	-0.6	232	1.7	5.5	-0.4	460	1.3	5.4	-0.4	335
Total	1.5	7.9	-0.6	1314	1.8	7.8	-0.5	1963	1.8	7.8	-0.6	1618

Table 3.1.5: The proportion of children age 6-59 months classified as having anaemia, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

	2018/2019					2019/2020				
Background characteristics	Anaemia status by haemoglobin level				Number of children age 6-59 months	Anaemia status by haemoglobin level				Number of children age 6-59 months
	Any anaemia (<11.0 g/ dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	severe anaemia (<7.0g/dl)		Any anaemia (<11.0 g/ dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	severe anaemia (<7.0g/dl)	
Child's age in months										
06-11	60.2	29.4	29.7	1.1	152	63.4	28.4	32.7	2.3	157
12-23	40.8	21.7	18.6	0.5	325	50.1	22.6	26.7	0.8	333
24-35	30.7	15.3	13.9	1.4	394	48.7	24.0	21.9	2.8	347
36-47	19.7	10.4	8.3	1.1	378	40.3	23.7	13.7	2.9	327
48-59	18.6	11.0	7.3	0.2	364	30.7	16.9	12.7	1.1	376
Child's Sex										
Male	32.6	15.8	16.7	0.2	785	42.9	20.8	20.0	2.1	761
Female	28.4	16.0	10.9	1.4	828	45.4	23.5	20.3	1.7	779
Sex of the household head										
Male	30.6	15.3	14.3	1.0	1,204	44.3	21.1	21.1	2.2	1136
Female	29.8	17.8	11.7	0.3	407	44.2	17.4	17.4	1.0	404
Marital status of the household head										
Married	30.8	15.8	14.1	0.9	1,419	44.7	22.1	20.8	1.8	1368
Not Married	27.6	16.9	10.2	0.5	191	40.2	23.5	14.4	2.3	172
Residence										
Urban	30.9	16.3	14.3	0.4	315	36.7	20.4	15.4	0.9	266
Rural	30.2	15.8	13.4	1.0	1,298	46.6	22.8	21.6	2.2	1274
Geographical regions										
Central	25.9	16.2	9.4	0.3	351	29.5	18.6	10.5	0.5	306
Eastern	35.5	16.0	18.6	0.9	390	57.5	26.0	28.3	3.2	482
Northern	27.2	14.0	12.9	0.3	489	51.0	24.6	24.6	1.8	453
Western	33.0	17.2	13.8	1.9	383	37.2	19.2	16.2	1.9	299
Total	30.4	15.9	13.6	0.9	1,613	44.3	22.3	20.2	1.9	1,540

TableE 3.1.6: The proportion of last births in 2 years preceding the survey that has a reported birth weight, and among the last births in 2 years preceding the survey with a reported birthweight, a percentage less than 2.5kg, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

	2018/2019				2019/2020			
Background characteristics	% of last births that have a reported birth weight	Number of last births 2 years preceding the survey	Among the last births with a reported birth weight		% of last births that have a reported birth weight	Number of last births 2 years preceding the survey	Among the last births with a reported birth weight	
			% less than 2.5kg	Number of last births 2 years preceding the survey			% less than 2.5kg	Number of last births 2 years preceding the survey
Age of mother in completed years								
15-19	32.9	55	5.5	19	84.6	40	3.3	30
20-29	59.9	376	6.1	215	73.9	334	9.1	236
30-39	73.9	242	1.8	162	72.2	248	8.2	175
40-49	44.7	52	3.2	31	54.6	61	8.9	32
Number of children ever born								
1	47.6	129	10.0	61	80.7	109	11.1	84
2-3	64.4	268	4.7	162	78.6	235	8.0	178
4-5	68.3	153	2.4	102	63.6	159	8.1	105
6+	58.3	175	1.7	102	62.6	180	7.6	106
Place of delivery								
Home	8.0	123	0.0	11	8.3	118	36.9	13
Government facility	89.2	367	4.5	321	88.1	394	9.2	346
Private facility	77.2	123	4.3	95	82.2	143	4.4	110
Residence								
Urban	70.9	167	2.6	120	82.7	137	7.4	114
Rural	56.3	558	5.5	307	68.5	546	8.9	359
Geographical regions								
Central	66.2	137	4.0	88	81.1	122	10.8	98
Eastern	49.9	199	3.7	102	63.9	185	8.1	117
Northern	62.2	198	4.9	115	70.8	223	9.7	147
Western	67.4	191	4.8	122	75.2	153	5.4	111
Total	61.2	725	4.4	427	72.5	683	8.5	473

Table 3.3.1: The proportion of women age 15-49 with anaemia, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

Background characteristics		2018/2019					2019/2020				
		Anaemia status by haemoglobin level				Number of women	Anaemia status by haemoglobin level				Number of women
		Any	Mild	Moderate	Severe		Any	Mild	Moderate	Severe	
		<12g/dl	10.0-11.9g/dl	7.0-9.9g/dl	<7g/dl		<12g/dl	10.0-11.9g/dl	7.0-9.9g/dl	<7g/dl	
	Not pregnant	<11g/dl	10.0-10.9g/dl	7.0-9.9g/dl	<7g/dl		<11g/dl	10.0-10.9g/dl	7.0-9.9g/dl	<7g/dl	
Age in completed years											
15-19		13.0	10.3	2.7	0.0	492	23.5	22.0	1.5	0.1	376
20-29		16.7	12.9	3.8	0.1	731	25.4	22.5	2.7	0.2	644
30-39		15.7	13.0	2.5	0.2	649	22.8	18.8	3.6	0.4	587
40-49		18.8	15.1	2.9	0.9	492	31.3	26.3	4.2	0.9	499
Number of children ever born											
0-1		9.5	6.3	3.1	0.0	244	27.5	22.1	5.3	0.0	198
2-3		16.7	12.6	4.1	0.0	500	23.6	21.5	2.0	0.1	458
4-5		21.0	17.2	3.4	0.4	406	28	23.7	4.0	0.4	399
6+		13.8	12.7	1.0	0.1	593	28.3	23.3	4.7	0.3	578
Maternity status											
Pregnant		13.8	10.5	3.3	0.0	157	29.7	16.6	12.7	0.4	160
Not pregnant		16.3	13.0	3.1	0.3	2,207	25.2	22.6	2.2	0.4	1,946
Using IUD											
Yes		2.6	2.6	0.0	0.0	42	19.2	19.2	0.0	0.0	37
No		15.6	13.0	2.4	0.2	1,098	22.4	19.6	2.5	0.3	564
Smoking status											
Yes		11.9	11.9	0.0	0.0	14	21.3	5.8	15.6	0.0	16
No		16.2	12.8	3.1	0.3	2,350	25.6	22.3	2.9	0.4	2,090
Residence											
Urban		17.5	13.9	3.6	0.0	573	24.9	22.2	2.2	0.5	472
Rural		15.4	12.2	2.8	0.4	1,788	25.8	22.1	3.4	0.3	1,634
Geographical regions											
Central		12.2	9.3	2.7	0.2	525	20.6	18.0	1.7	0.8	474
Eastern		21.0	18.3	1.9	0.8	569	33.6	28.0	5.4	0.2	559
Northern		15.5	12.1	3.4	0.0	746	19.2	16.7	2.1	0.4	635
Western		16.5	12.1	4.4	0.0	524	28.2	25.3	2.9	0.0	438
Total		16.1	12.8	3.1	0.2	2,364	25.6	22.1	3.1	0.4	2,106

Table 3.3.2: The proportion of thinness, overweight and obesity among both men and women by background characteristics, Uganda National Panel Surveys 2018/19 and 2019

Background characteristics	2018/19					2019/20				
	Thin <18.5	Normal 18.5-24.9	Overweight 25-29.9	Obese BMI>=30	Total	Thin <18.5	Normal 18.5-24.9	Overweight 25-29.9	Obese BMI>=30	Total
National	12.6	65.3	15.3	6.8	5826	12.5	62.4	16.9	8.2	5146
Sex										
Female	8.9	61.4	19.5	10.1	3,479	9	58.2	21	11.8	3132
Male	18.3	71.1	8.9	1.7	2,347	18.1	69.3	10.3	2.3	2014
Residence										
Rural	13.8	69.4	12.7	4.1	4436	14.2	66.1	14.7	5	4014
Urban	10.1	56.3	21	12.6	1390	8.3	53.1	22.6	15.9	1132
Geographical region										
Central	7.2	59.3	21.4	12.1	1287	8.3	57.9	20.7	13.1	1193
Eastern	15.9	65.2	15.2	3.8	1477	14.1	63.3	18.3	4.3	1314
Northern	18.7	71.2	7.3	2.7	1777	19.9	68.7	7.7	3.6	1534
Western	9.5	66.2	16.4	7.9	1285	9	61	19.6	10.4	1105
Age group										
15-49	11.6	67.2	15.5	5.7	4422	11.5	63.8	17.8	6.9	3793
50-59	13.3	58.5	16.3	12	670	10.9	60.6	14.8	13.7	597
60+	19.4	57.8	13.3	9.5	734	19.6	55.1	13.6	11.7	756
Female										
Residence										
Rural	10	66.7	17.3	6	2616	10.5	63	19.2	7.4	2404
Urban	6.6	50.6	24	18.8	863	5.5	47.1	25.3	22.1	728
Geographical region										
Central	4.3	52.4	25.9	17.4	810	4.9	51.3	24.9	18.9	752
Eastern	14	61.9	18.9	5.1	873	11.7	59.7	22.6	6	809
Northern	12.8	72.7	10.3	4.2	1025	15.4	70.3	8.7	5.7	901
Western	5.4	61.3	21.1	12.2	771	5.6	54.1	25.6	14.6	670
Age group										
15-49	8.1	63.2	19.8	8.9	2634	8.3	59.4	22.3	10	2,304
50-59	8.7	53.6	21.8	15.9	408	7.6	55.8	16.6	20.1	369
60+	15.2	56.5	14.8	13.5	437	15.3	52.1	16.4	16.2	459
Male										
Residence										
Rural	19.3	73.3	5.9	1.5	1820	19.8	71	7.7	1.5	1610
Urban	15.8	65.7	16.1	2.3	527	13.5	64.4	17.6	4.5	404
Geographical region										
Central	12.2	71.4	13.4	3	477	14.2	69	13.6	3.3	441
Eastern	18.8	70.3	9.3	1.7	604	18.1	69.5	10.9	1.5	505
Northern	26.5	69.3	3.4	0.8	752	26.8	66.4	6.2	0.6	633
Western	15.5	73.3	9.7	1.5	514	14.4	72.1	10	3.5	435
Age group										
15-49	16.9	73.3	8.8	0.9	1,788	17	71.1	10.3	1.7	1,489
50-59	20.5	66.3	7.4	5.8	262	16.6	68.8	11.8	2.8	228
60+	25.4	59.5	11.3	3.7	297	25.8	59.2	9.7	5.3	297

Table 3.3.3: The proportion of raised blood pressure both men and women by background characteristics, Uganda National Panel Surveys 2018/19 and 2019

Characteristics	2018/19				2019/20			
	Normal BP- Systolic<120 Diastolic<80	Pre-Hypertensive Systolic 120- 139 Diastolic 80-89	Hypertensive Systolic ≥140 Diastolic ≥90	Total	Normal BP- Systolic<120 Diastolic<80	Pre-Hypertensive Systolic 120- 139 Diastolic 80-89	Hypertensive Systolic ≥140 Diastolic ≥90	Total
National	52.5	36.8	10.7	5780	58.7	33.8	7.5	5119
Male	41.4	46.8	11.8	2310	49.0	41.8	9.2	1,995
Female	59.7	30.3	10.1	3470	64.5	29.0	6.5	3124
Age								
15-49	58.6	36.0	5.5	4,342	65.0	32.1	2.9	3,746
50-59	36.0	42.2	21.7	666	41.4	38.9	19.6	591
60+	26.3	37.0	36.7	772	34.1	40.0	25.9	782
Residence								
Rural	52.6	35.9	11.5	4,411	60.1	32.3	7.5	3998
Urban	52.4	38.6	9.0	1,369	55.1	37.4	7.6	1121
Geographical region								
Central	51.0	36.0	13.0	1,306	54.5	38.3	7.2	1,189
Eastern	49.4	40.2	10.5	1,441	57.5	34.4	8.1	1,298
Northern	54.2	36.5	9.3	1,761	63.2	28.2	8.6	1,531
Western	55.7	34.6	9.8	1,272	60.6	32.9	6.5	1,101
Men								
15-49	43.7	48.3	8.0	1,737	52.6	43.0	4.4	1,462
50-59	36.4	42.5	21.1	264	42.9	34.6	22.4	227
60+	30.9	40.8	28.3	309	33.5	40.0	26.5	306
Women								
15-49	68.1	28.1	3.8	2,605	72.5	25.6	2.0	2,284
50-59	35.8	42.1	22.1	402	40.6	41.4	18.0	364
60+	23.3	34.4	42.3	463	34.5	39.9	25.5	476

BREASTFEEDING
 ANAEMIA
 INDICATORS
 PREGNANT
 OVERWEIGHT
 FOOD SAFETY
 MATERNAL
 WASTING
 FEEDING PRACTICES
 CHILDREN
 UNDERNUTRITION
 UGANDA
 STUNTING



DIETARY DIVERSITY
 NUTRITION

DIET-RELATED
 MEAL FREQUENCY
 UNDERWEIGHT

WOMEN
 HEALTH
 MEAL FREQUENCY,

5

DIVERSITY

ADOLESCENT
 NEWBORN
 MINIMUM ACCEPTABLE DIET
 MALNUTRITION
 MICRONUTRIENT

04

Nutrition Specific Indicators

Summary of Key Findings



The proportion of mother who initiated **early initiation of breastfeeding** declined from **83.5%** to **81.7%**. **20.55%** of children were given something other than breastmilk in the first 3 days of life and **94.5%** of children were ever breastfed.



The proportion of children who were fed **from a bottle** with a nipple declined from **15.4%** in 2018/19 to **12.9%** in 2019/20.



Overall, **11.4%** of children **received the required minimum dietary diversity**, **53.8%** met the required minimum meal frequency and **8.0%** met the required minimum acceptable diet.



The proportion of children (6-23 months) that received **Vitamin A supplementation** declined from **76.9%** to **75.8%**.



Overall, only **5 in 10** of children between 12-59 months in the panel were **dewormed**.



The proportion of women of reproductive age (15-49) that **met the minimum dietary diversity** declined from **14%** in 2018/19 to **11%** in 2019/20.



The proportion of households that had **two meals per day** including breakfast declined from **39.1%** to **37.5%** in 2018/19 and 2019/20 respectively.

The proportion of children under 2 years that had **diarrhoea** 2 weeks preceding the survey declined from **17.3%** and **11.3%** in 2018/19 and 2019/20 respectively. An increase in those that were given oral rehydration solutions and zinc was observed **45.1%** in 2018/19 to **48.9%** in 2019/20.

A slight decline in the proportion of children that had **fever** from **26.1%** in 2018/19 to **25.2%** in 2019/20 respectively was observed. Among these, **95.6%** and **94.1%** in 2018/19 and 2019/20 were sought advice or treatment for management of the fever.

The proportion of children that **slept under a mosquito net** slight reduced from **83.2%** in 2018/19 to **81.2%** in 2019/20.

4.1 Maternal Infant Young Child Adolescent and Adult Nutrition (MIYCAAN)

4.1.1 Early initiation of breastfeeding

The infant and young child feeding (IYCF) policy guidelines stipulate that under normal circumstances, all mothers should be counselled and supported to initiate breastfeeding within an hour of delivery and to exclusively breastfeed their infants for the first 6 months of the infant's life unless medically contra-indicated⁴. Early initiation of breastfeeding benefits the baby through increasing the ability to fight against infections and reducing the risk of diarrhoeal diseases increasing the survival rate of the child. The UNPS collected data on the last-born children in the 24 months/2 years before the survey who were put to the breast within one hour of birth. The findings showed a decline in early initiation of breastfeeding from

83.5% in 2018/19 to 81.7% in 2019/20. See graph 4.1.1 and Table 4.1.1

- Early initiation of breastfeeding was highest in the Western region and least in the Central region during both rounds of the panel.
- Similar observations were made in the proportion of early initiation of breastfeeding among children in rural and urban households.
- Breastfeeding initiation was lower for male children compared to female children in both rounds of the panel (81.8% vs 84.8% and 76.8% vs 85.8% in 2018/19 and 2019/20 respectively).

Also, the UNPS data showed that 21.3% and 20.55% of children in 2018/19 and 2019/20 respectively were given something other than breastmilk in the first 3 days of life. 94.% and 94.5% of children in 2018/19 and 2019/20 had ever breastfed. See Table 4.1.1c.



4 Policy Guidelines on Infant and Young Child Feeding, 2009, Ministry of Health Uganda

4.1.2 Bottle feeding

The IYCF guidelines⁵ also stipulate cup feeding in situations where breastfeeding is not a feasible option for the mother in discouragement for bottle feeding. Compared to bottle feeding, the guidelines state that cups are much easier to clean, don't interfere with suckling at the breast and it enables the baby to control their intake. As such, data was collected on the last-born children aged 0-23 months who drunk anything from a bottle with a nipple the previous day before the interview. The findings showed a decline in bottle feeding from 15.4% in 2018/19 to 12.9% in 2019/20. See *graph 4.1.2 and Table 4.1.2a*.

- Despite a decline, urban areas still had a higher proportion of children who were bottle-fed during both rounds of the panel despite a decline in between the panel while the proportion in rural households increased.
- During both rounds of the panel, the Central region had the highest proportion of children that were bottle-fed while the Eastern region had the least proportion.
- Bottle feeding was higher in male-headed households compared to female-headed households during both rounds of the panel, 17.0% vs 11.7% and 14.6% vs 7.9% in 2018/19 and 2019/20 respectively.

FIGURE 4.1.1: TRENDS IN THE PROPORTION OF CHILDREN WHO WERE INITIATED ON THE BREAST WITHIN AN HOUR OF BIRTH

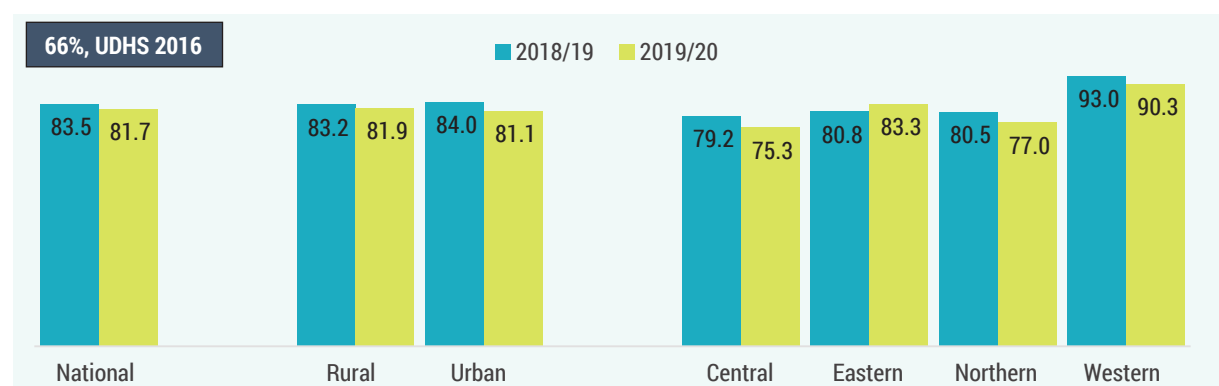
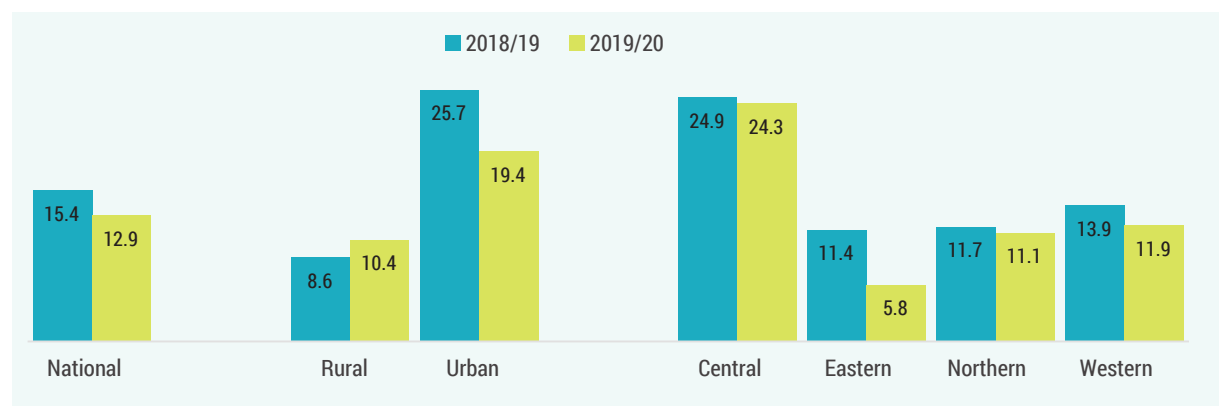


FIGURE 4.1.2: TRENDS IN THE PROPORTION OF BOTTLE-FED CHILDREN



⁵ Policy Guidelines on Infant and Young Child Feeding, 2009, Ministry of Health Uganda

4.1.3 Minimum dietary diversity for children

The Infant and Young Child Feeding (IYCF) policy guidelines developed by the Ministry of Health (MOH) require that children from 6 months of age be given other solid or semi-solid (complementary feeding in addition to breastfeeding. This ensures that the child's food meets the nutrient requirements of its growing body⁶. Minimum dietary diversity (MDD) is the proportion of children 6–23 months of age who receive foods from 4 or more food groups⁷. The variation in food groups ensures that the child's body receives a variety of required nutrients that are specific to food groups. The UNPS results reveal that nationally, 11.4% of children received the required MDD. See *graph 4.1.3 and Table 4.1.3a*

- The proportion of children that met the required MDD was lower in children who were rural households compared to urban households.
- The Central and Eastern region had the highest proportion of children that met the required MDD. However, a decline in the proportion was observed in the Central region during 2019/20.

The proportion of children that met MDD was higher among non-breastfed children compared to breastfed children in both panel rounds, 24.4% vs

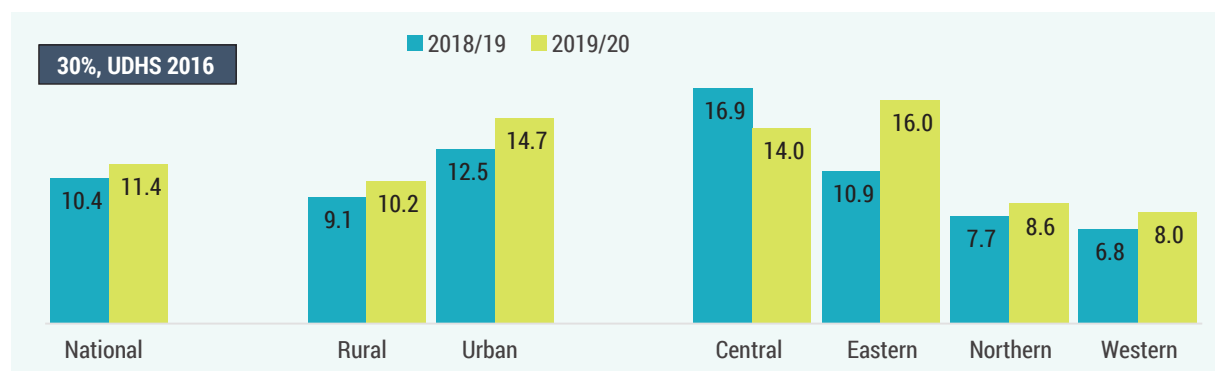
6.0% and 16.2% vs 9.8%, in 2018/19 and 2019/20 respectively. See *Tables 4.1.1a/b*

4.1.4 Minimum meal frequency for children

Minimum meal frequency (MMF) among infants and young children is defined as the proportion of breastfed and non-breastfed children 6–23 months of age, who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more⁸. The calculation of MMF differs by feeding and age categories because of a difference in nutritional and energy requirements for each by category. Among breastfed children 6-8 months and 9-23 months, MMF is 2 and 3 times respectively while for non-breastfed children MMF is defined as 4 times for children 6-23 months. The UNPS findings revealed an increase in the proportion of children that met MMF from 47.7% to 53.8%. See *graph 4.1.4 and Table 4.1.4a*.

- Overall, the proportion of that met the required MMF was higher among male children compared to female children during both rounds of the panel, 50.5% vs 45.8% and 55.6% vs 52.5% in 2018/19 and 2019/20 respectively.
- Among breastfed children, 44.4% and 55.0% met required MMF while among non-breastfed

FIGURE 4.1.3: TRENDS IN THE PROPORTION OF CHILDREN WHO MET THE REQUIRED MINIMUM DIETARY DIVERSITY



6 Ministry of Health, Uganda, Policy Guidelines on Infant and Young Child Feeding January 2009

7 World Health Organization, 2010, Indicators for assessing infant and young child feeding practices Part 3 Country profiles

8 World Health Organization, 2010, Indicators for assessing infant and young child feeding practices Part 3 Country profiles

children, 58.5% and 50.2% met the required MMF in 2018/19 and 2019/20 respectively. See tables 4.1.1b/c.

- The Eastern region had the least proportion of children that met the required MMF during both rounds despite an increase from 33.6% to 47.0% in 2018/19 and 2019/20 respectively. The Western region had the highest proportion of children that met MMF in both rounds.

4.1.5 Minimum acceptable diet for children

Minimum Acceptable Diet (MAD) for infants and young children is the proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk)⁹. MAD is the proportion of infants and children who receive

both MDD and MMF. The UNPS results showed that the proportion of infants/children that meet MAD nationally was a mere 8.0% in 2018/19 and 8.7% in 2019/20. This finding highlights a gap in the quality of complementary feeding. See *graph 4.1.5 and Table 4.1.5a*.

- The proportion of children that met MAD was higher in urban areas compared to rural areas during both rounds of the panel.
- The Central and Eastern regions had the highest proportion of children that met MAD in 2018/19 and 2019/20 respectively. The Western region had the lowest proportions of children that met MAD during both panel rounds.
- The proportion of children that met MAD was higher among non-breastfed children

FIGURE 4.1.4: TRENDS IN THE PROPORTION OF CHILDREN WHO MET THE REQUIRED MMF

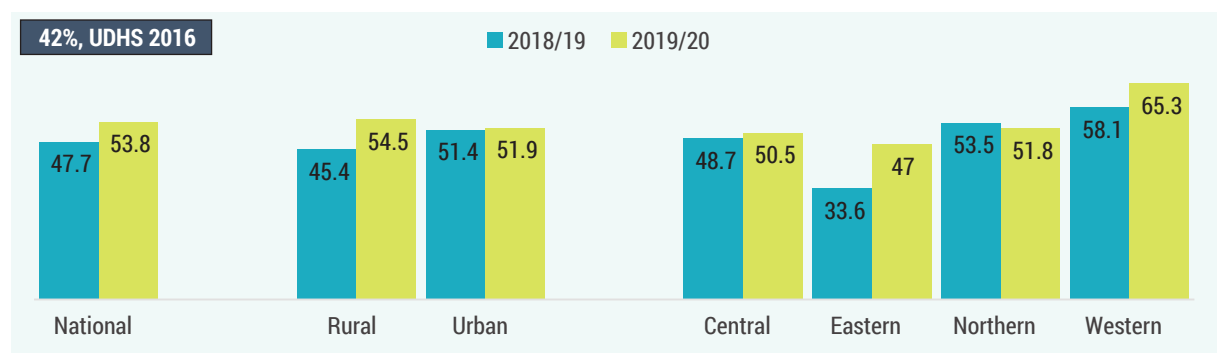
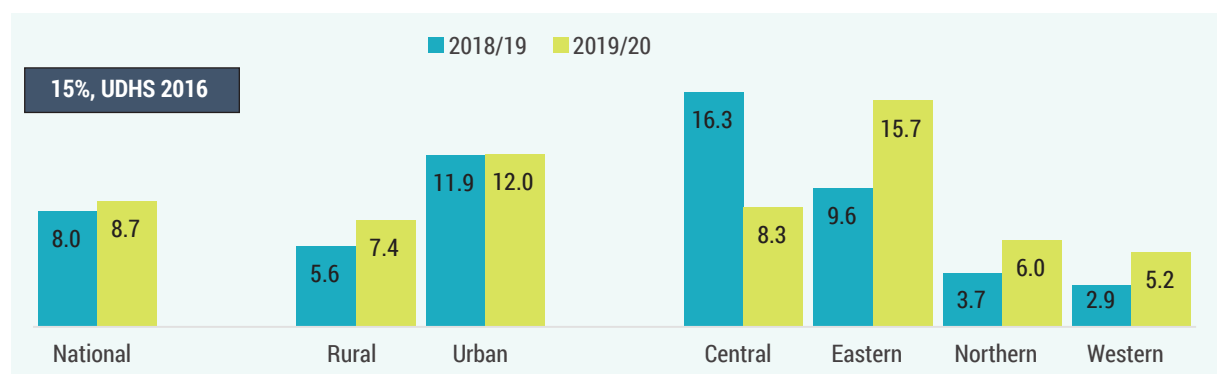


FIGURE 4.1.5: TRENDS IN THE PROPORTION OF CHILDREN WHO MET THE REQUIRED MAD



⁹ World Health Organization, 2010, Indicators for assessing infant and young child feeding practices Part 3 Country profiles

compared to breastfed children during both rounds of the panel, 20.7% vs 4.0% and 14.6 vs 6.7% in 2018/19 and 2019/20 respectively.

Also, the UNPS findings also revealed that only 11% (2018/19) and 11.9% (2019/20) of children 6-8 months in the panel were introduced to solid, semi-solid or soft foods in addition to breastfeeding i.e. complementary feeding. See Table 4.1.1b.

4.1.6 Minimum dietary diversity for women of reproductive age

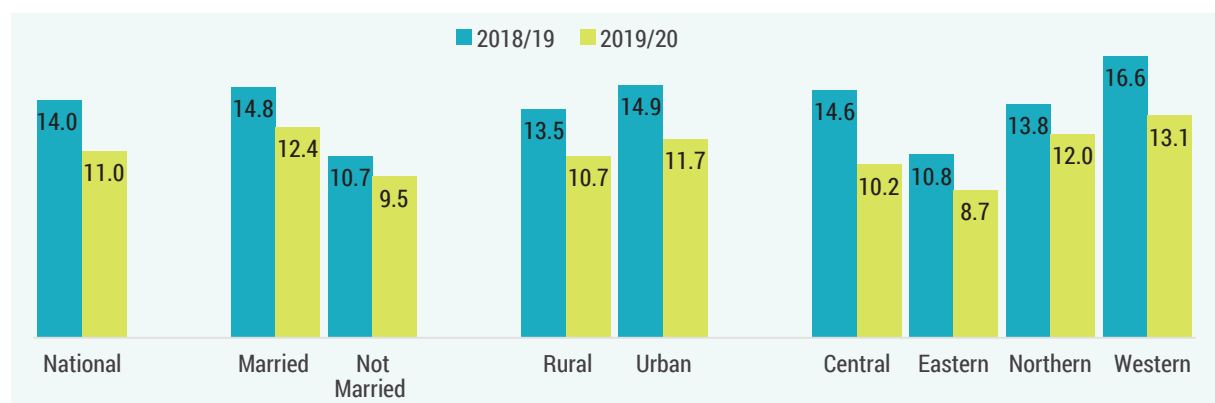
Minimum Dietary Diversity for Women (MDDW), is the proxy measure for diet quality for women of reproductive age (WRA) aged 15-49. It aims at assessing the adequacy of micronutrients in a diet, through the measure the proportion of women who have consumed at least 5 out of 10 food groups that are categorized according to micronutrient content. These food groups are, Grains, white roots and tubers, and plantains; Pulses (beans, peas, and lentils); Nuts and seeds, Dairy, Meat, poultry and fish, Eggs, Dark green leafy vegetables, Other vitamin A-rich fruits and vegetables, Other vegetables, Other fruits¹⁰. Low MDDW influences diet micronutrient nutrition outcomes such as high rates of anaemia in addition to poor birth outcomes. The UNPS results revealed a low proportion of WRA that met MDDW at 14% in 2018/19 and 11% in 2019/20. See graph 4.1.6 and Table 4.1.6.

- The proportion of WRA that met the MDDW decline between both rounds of the panel. The proportion was higher among married women compared to unmarried women and higher in urban households compared to rural households.
- During both panel rounds, the Western region had the highest proportion of WRA the met the MDDW while the Eastern region had the least proportion.
- The Western region had the highest proportion of WRA that met the required MDDW while the Eastern region has the least proportion.

4.1.7 Vitamin A supplementation

Vitamin A supports the proper growth and development of children and it plays a vital role in the body's ability to fight against infection. Constantly low Vitamin A in the body leads to blindness and impaired resistance to infections. Vitamin A deficiency is a major contributor to malnutrition in Uganda. In areas where vitamin A deficiency is of public health concern, vitamin A supplementation reduces morbidity and mortality among children. The UNPS findings revealed that nationally, 76.9% of children aged 6-23 months received Vitamin A supplementation in 2020/19 compared to 75.8%. See graph 4.1.7 and Table 4.1.7.

FIGURE 4.1.6: TRENDS IN THE PROPORTION OF WRA (15-49 YEARS) WHO MET THE REQUIRED MDDW



10 FAO and FHI 360. 2016. Minimum Dietary Diversity for Women: A Guide for Measurement. Rome: FAO.

- The proportion of children 6-23 months who received Vitamin A supplementation was similar in both urban and rural households. The Western region had the highest proportion of children that received Vitamin A supplementation during both rounds of the panel.
- During the 2018/19 panel, no data on Vitamin A supplementation among children aged 2 years and above. In 2019/20, the proportion of children aged 6-59% that received Vitamin A supplementation was 66.8%. The proportion was 79.4%, 65.9%, 61.5%, 60.1% in the Western, Northern, Central and Eastern regions respectively.

4.1.8 Deworming

Intestinal helminth infections, most of which are soil-transmitted, are directly caused by poor sanitation in the environment that the

children live. Helminth infections affect children's nutritional status by causing poor absorption of nutrients, poor appetite (causing undernutrition) and increased blood loss (causing anaemia). Helminths infection can also cause poor child growth and development outcomes including ease of infections. Preventive chemotherapy (deworming) is recommended as a public health intervention for all young children from one year through the fourth year. Nationally, the UNPS data revealed that only 5 in 10 of children between 12-59 months were dewormed. See *graph 4.1.8 and Table 4.1.8*.

- The proportion of children that were dewormed was higher in urban areas compared to rural areas but slightly declined between both rounds of the panel.
- The Western region had the highest proportion of children that had received deworming

FIGURE 4.1.7: TRENDS IN THE PROPORTION OF CHILDREN 6-23 MONTHS WHO RECEIVED VITAMIN A SUPPLEMENTATION

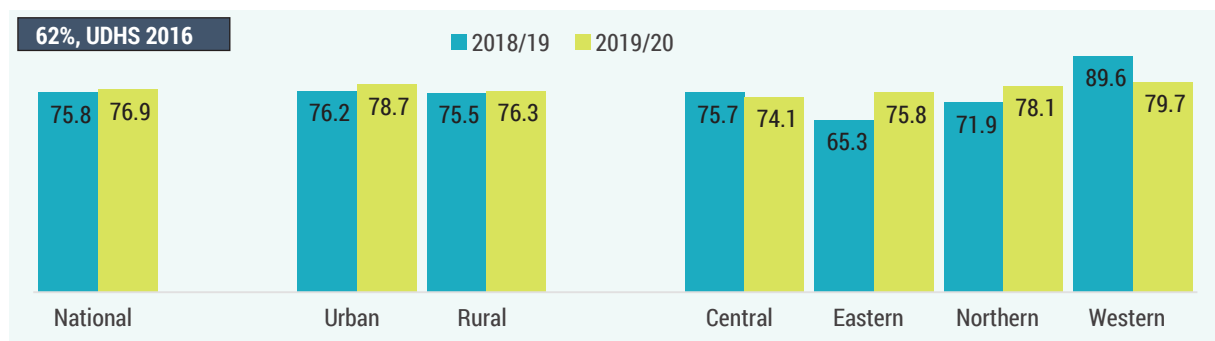
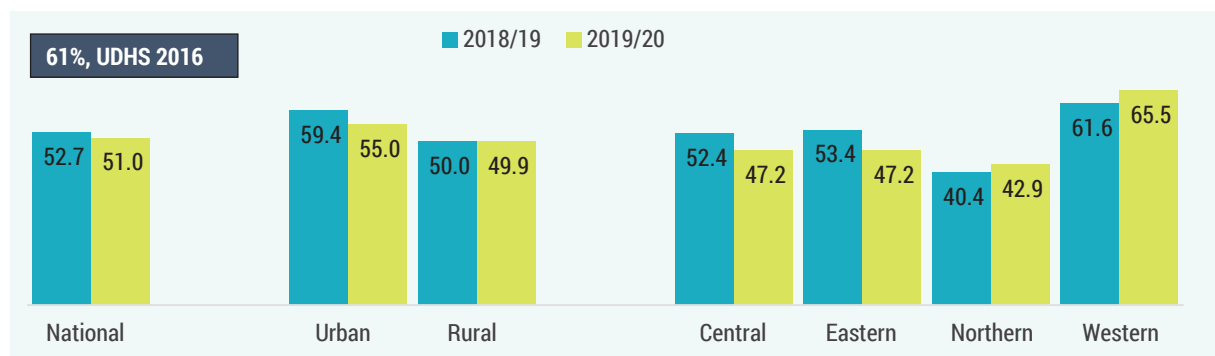


FIGURE 4.1.8: TRENDS IN THE PROPORTION OF CHILDREN UNDER 5 YEARS WHO RECEIVED DEWORMING MEDICATION



medication while the Northern region had the least proportion, 61.6% and 65.5% vs 40.4% and 42.9% respectively.

4.2 Household meal frequency

Meal frequency helps to provide estimates of availability of food and food consumption habits at households. Also, it provides general information as to whether the household's daily consumption can meet the body's daily food requirements. Although minimum meal frequency is calculated in-depth for children under 2 years, household food consumption habits may influence IYCF feeding practices. The UNPS findings revealed a reduction in the proportion of households that had two meals per day including breakfast from 39.1% to 37.5% in 2018/19 and 2019/20 respectively. See *graph 4.2 and Table 4.2*.

- The proportion of household that provides only two meals per day, breakfast inclusive, was much higher in rural households compared to urban households during both rounds of the panel, 46.1% vs 25.4% and 44.3% vs 22.8% in 2018/19 and 2019/20 respectively.
- The Northern region had the highest proportion of households that provided two meals per day, breakfast inclusive, during both panel rounds (51.8% and 53.14% in 2018/19 and 2019/20 respectively. This was the only region where

an increase in this proportion was observed. On the other hand, the Eastern region had the least proportion.

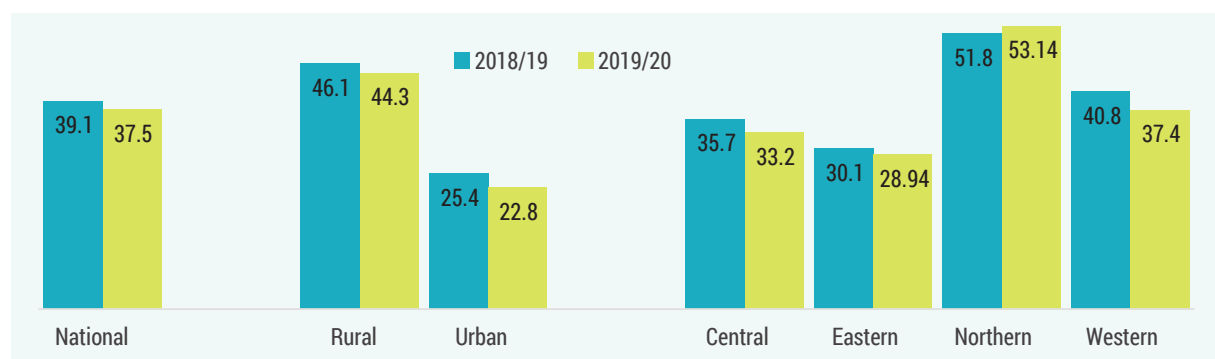
- Male headed households accounted for a slightly lower proportion of households that had two meals per day including breakfast compared to female-headed households, 38.7% vs 39.6% and 35.8% vs 40.9% in 2018/19 and 2019/20 respectively.

4.3 Nutrition in child health care

4.3.1 Measles and DPT3 coverage

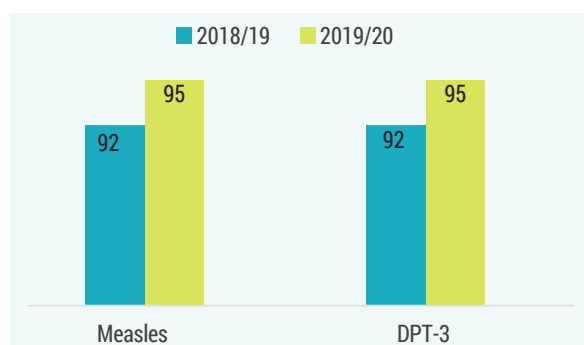
Immunising children against vaccine-preventable diseases can greatly reduce childhood morbidity and mortality. In nutrition, poor nutrition outcomes such as underweight, wasting and stunting are more frequent among non-vaccinated children and children that do not complete their vaccination schedules. Vaccination information was collected from the immunization cards and in absence the cards, the child's other provided the required information. The UNPS findings revealed an increase in measles immunization coverage of children aged 12-23 months from 93% in 2018/19 to 95% in 2019/20 while DPT3 coverage also increased from 92% to 95% respectively. The proportions are slightly higher than the observations made during the UDHS in 2016. See *graph 4.3.1 and Table 4.3.1*.

FIGURE 4.2: TRENDS IN THE PROPORTION OF HOUSEHOLDS THAT PROVIDED TWO MEALS PER DAY INCLUSIVE OF BREAKFAST.



- 42.8% in 2018/19 and 52.2% in 2019/20 of measles vaccination information was collected from the mother's report while 40.9% and 51.1% of DPT-3 immunization information in 2018/19 and 2019/20 of was collected from the mother reports.

FIGURE 4.3.1: TRENDS IN THE PROPORTION OF CHILDREN (0-23 MONTHS) THAT RECEIVED MEASLES AND DPT 3 VACCINATIONS.



4.3.2 Diarrhoea

Diarrhoea causes the loss of water and important electrolytes from the body. Diarrhoea is a leading cause of mortality and morbidity among children under 5 years of age. Further, it is one of the leading causes of malnutrition in children as it results in a reduction in the ability of the body to absorb the required nutrition's from the food and in some cases, the loss of appetite. Consequently, this makes the child's body susceptible to other

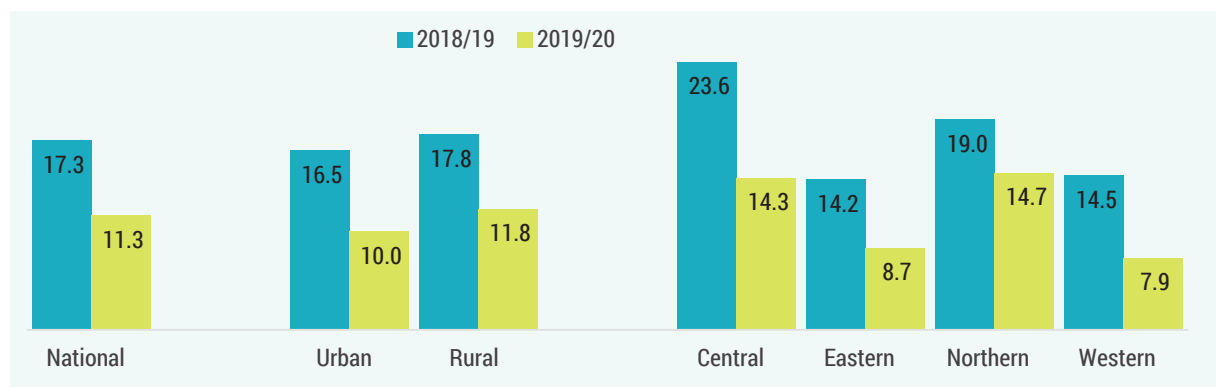
infections. The frequency of diarrhoeal episodes especially within the first 2 years of life increases the risk of stunting and delayed cognitive stimulation. The UNPS data revealed a decline in the proportion of children under 2 years that had diarrhoea 2 weeks preceding the survey from 17.3% and 11.3% in 2018/19 and 2019/20 respectively. See graph 4.3.2 and Table 4.3.2.

- The proportion of children under 2 years that had diarrhoea also decreased in all regions, notably, the Central region had the highest proportion of children with diarrhoea in 2018/19, however, in 2019/20, the Northern region had the highest proportion.
- The UNPS additionally collected data on the occurrence of diarrhoea among children up to 5 years during 2019/20. During this period, 7.4% of children under 5 years had a diarrhoea episode 2 weeks preceding the study. The proportion was 11.7%, 8.1%, 6.3% and 4.6% in the Northern, Central, Eastern and Western regions respectively.

4.3.3 Diarrhea management

Oral rehydration solutions (ORS) and zinc are an effective treatment of the dehydration caused by diarrhoea. The findings of the UNPS revealed a slight increase in the proportion of children under 2 years that had diarrhoea 2 weeks preceding the study and were given ORS and zinc from 45.1% in

FIGURE 4.3.2: TRENDS IN THE PROPORTION OF CHILDREN UNDER 2 YEARS HAD DIARRHOEA 2 WEEKS PRECEDING THE SURVEY



2018/19 to 48.9% in 2019/20. See graph 4.3.3 and Table 4.3.3.

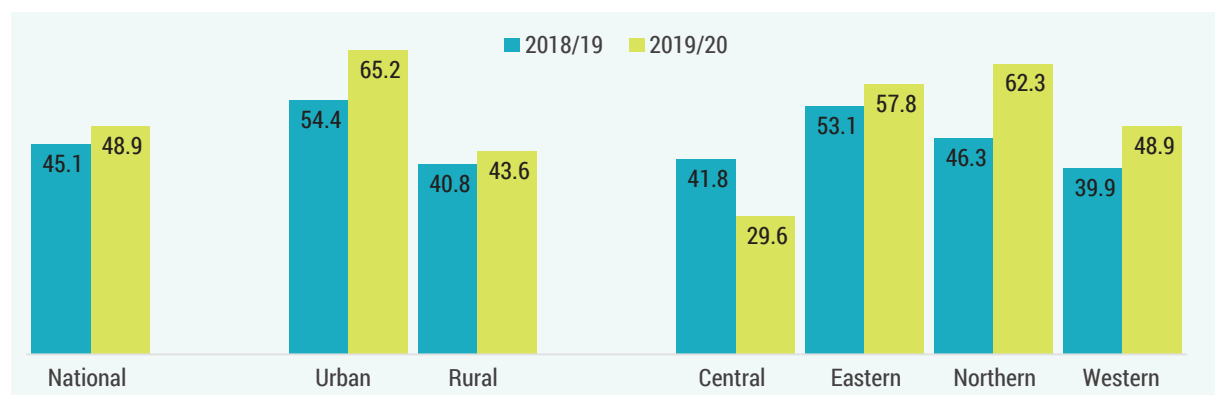
- The proportion was higher in urban areas compared to rural areas during both rounds of the panel, 54.4% and 65.2% vs 40.8% and 43.6% in 2018/19 and 2019/20 respectively.
- The least proportion was observed in the Central region during both rounds of the panel.
- In 2019/20, among children under 5 years that had diarrhoea 2 weeks preceding the study, 46.8% received ORS and zinc. The proportion was 56.4%, 55.3%, 40.0%, and 33.1% in the Eastern, Northern, Western and Central region respectively.
- Among the children below 2 years who had diarrhoea, 11.3% received recommended home fluids (RHF) in 2018/19 compared to 10.6% in 2019/20, the least proportion of which was in the Eastern region (4.3% and 8.4% in 2018/19 and 2019/20 respectively).
- In 2019/20, 10.6% of the children below 5 years who had diarrhoea received RHF, the least proportion of which was in the Central region 5.0%. The proportion of all children that received RHF was higher in urban areas as compared to rural areas.

4.3.4 Fever

Fever commonly associated with malaria in malaria-endemic countries like Uganda usually results in loss of appetite consequently reducing dietary intake. The UNPS collected data on the presence and management of fever among children 0-59 years two weeks preceding the survey. The finding revealed that a slight decline in the proportion of children that had a fever from 26.1% in 2018/19 to 25.2% in 2019/20 respectively. Among the children who had a fever, 95.6% and 94.1% in 2018/19 and 2019/20 were sought advice or treatment for the management of the fever.

- The proportion of children with fever was higher in rural households compared to households in urban areas during both rounds of the panel 30.8% vs 16.9% and 26.1% vs 22.6% in 2018/19 and 2019/20 respectively.
- The highest proportion of children with fever was observed in the Eastern region 39.9% in 2018/19 and the Northern region 34.8% in 2019/20. The least proportion was observed in the Western region during both rounds of the panel, 17.9% and 16.9% in 2018/19 and 2019/20 respectively.

FIGURE 4.3.3: TRENDS IN THE PROPORTION OF CHILDREN UNDER 2 YEARS HAD DIARRHOEA 2 WEEKS PRECEDING THE SURVEY THAT WAS MANAGED THROUGH GIVING ORS AND ZINC



- The lowest proportion for whom advice/treatment for fever was sought was observed in the Western region (92.6% and 90.2% in 2018/19 and 2019/20 respectively).

4.3.5 Mosquito net utilisation among children

Mosquito net use helps in the prevention of malaria which results in fever and anaemia. The proportion of children that slept under a mosquito net slightly reduced from 83.2% in 2018/19 to 81.2% in 2019/20.

- The proportion is lower in rural areas compared to urban areas, 90.4% vs 79.8% and 87.3% vs 79.2% in 2018/19 and 2019/20 respectively.
- The Northern region had the least proportion of children that slept under the mosquito nets despite an increase between the rounds of the UNPS from 76.3% to 78.3%. The Eastern region had the highest proportion of children that slept under a mosquito net during both rounds of the UNPS, 86.1% in 2018/19 and 83.9% in 2019/20.

FIGURE 4.3.4: TRENDS IN THE PROPORTION OF CHILDREN UNDER 5 YEARS THAT HAD FEVER 2 WEEKS PRECEDING THE SURVEY

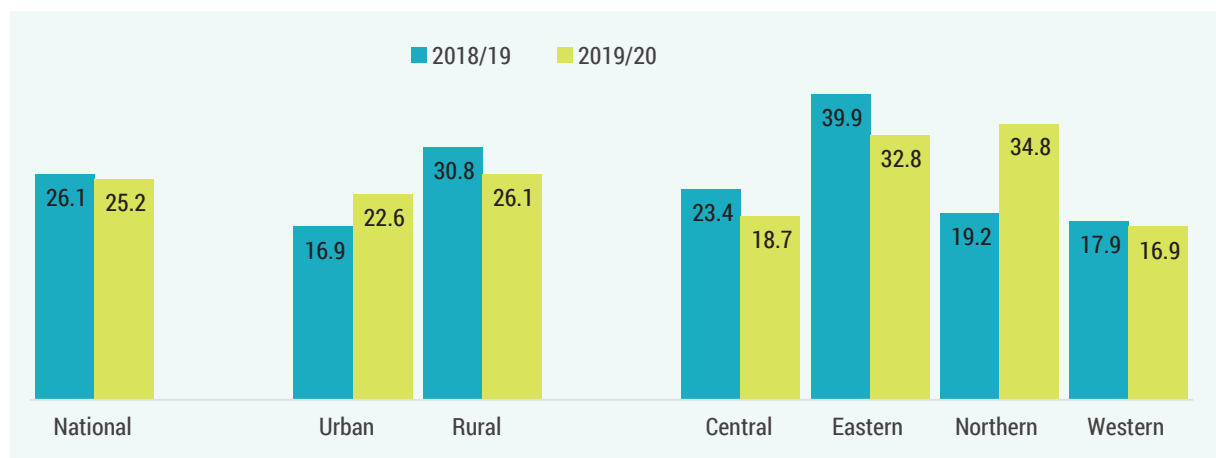
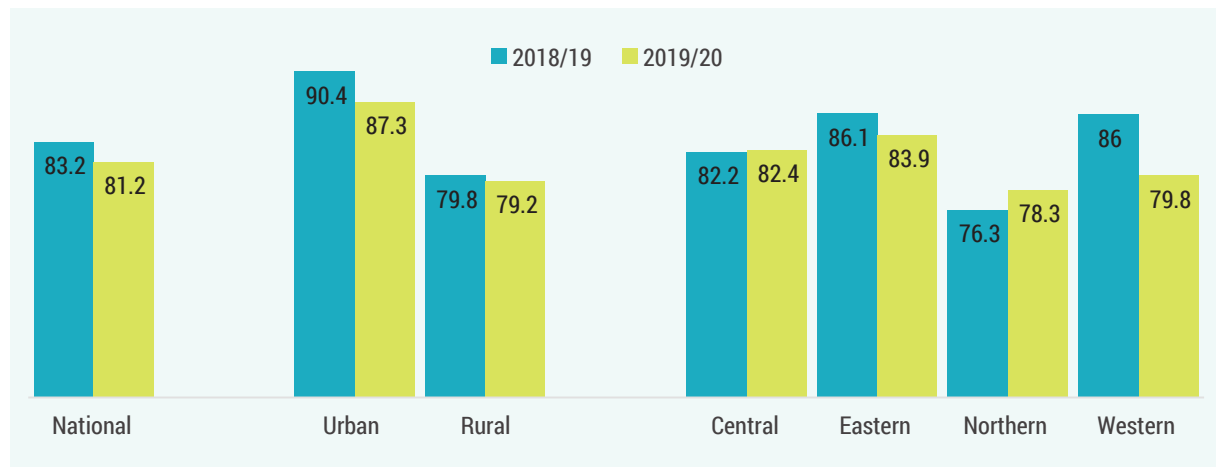


FIGURE 4.3.5 PERCENTAGE OF CHILDREN UNDER 5 YEARS WHO SLEPT UNDER A MOSQUITO NET LAST NIGHT (NIGHT PRECEDING INTERVIEW)



LIST OF TABLES

Table 4.1.1a: The proportion of children who are initiated of breastfeeding within 1 hour of birth, The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background characteristics	2018/19		2019/20	
	Percentage who started breastfeeding within 1 hour of birth	Number of children	Percentage who started breastfeeding within 1 hour of birth	Number of children
Nationally				
Children 0-23 months	83.5	430	81.7	667
Child's age in months				
<6	73.5	97	77.2	172
6-8	86.9	58	84.4	81
9-11	90.6	64	67.8	96
12-17	89.0	120	85.3	172
18-23	79.0	91	91.1	146
Child's sex				
Male	81.8	205	76.8	333
Female	84.8	225	85.8	334
Sex of household head				
Male	82.8	320	80.9	503
Female	85.0	110	83.9	164
Marital status of the household head				
Married	82.2	377	81.4	601
Not Married	90.5	53	85.8	66
Residence				
Rural	83.2	321	81.9	535
Urban	84.0	109	81.1	132
Regions				
Central	79.2	87	75.3	115
Eastern	80.8	127	83.3	187
Northern	80.5	122	77.0	219
Western	93.0	94	90.3	146

Table 4.1.1b: The proportion of children born in the previous 24 months of the survey that had ever been breastfed, The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/19		2019/20	
	Percentage ever breastfed	Number of children	Percentage ever breastfed	Number of children
Nationally				
Children 0-23 months	94.8	461	94.5	718
Child's age in months				
<6	97.9	103	98.1	178
6-8	99.2	58	98.6	85
9-11	100	65	98.6	98
12-17	96.8	127	93.3	186
18-23	83.0	108	88.1	171
Child's sex				
Male	96.6	219	93.5	356
Female	93.4	242	95.3	362
Sex of household head				
Male	94.6	341	94.6	539
Female	95.1	120	94.2	179
Marital status of household head				
Married	94.9	404	94.7	644
Not Married	94.0	57	92.9	74
Residence				
Rural	92.2	347	95.1	570
Urban	99.1	114	92.9	148
Regions				
Central	93.0	96	92.6	130
Eastern	96.7	132	97.5	198
Northern	98.0	131	97.0	229
Western	91.9	102	90.9	161

Table 4.1.1c: The proportion of last-born children aged 0-23 months who had ever breastfed and were given something other than breast milk during the first 3 days of life, The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/19		2019/20	
	Percentage who had Prelacteal feeding	Number of children	Percentage who had Prelacteal feeding	Number of children
Nationally				
Children 0-23 months	21.3	429	20.5	667
Child's age in months				
<6	32.7	99	24.5	172
6-8	11.9	58	20.9	82
9-11	20.6	64	31.9	95
12-17	19.5	118	16.0	172
18-23	17.4	90	13.4	146
Child's sex				
Male	24.3	203	23.8	332
Female	18.9	226	17.8	335
Sex of household head				
Male	20.0	319	20.9	507
Female	24.4	110	19.2	160
Marital status of the household head				
Married	20.2	377	20.4	602
Not Married	27.5	52	21.3	65
Residence				
Rural	17.2	320	18.3	535
Urban	27.4	109	26.4	132
Regions				
Central	37.9	88	35.0	115
Eastern	30.5	127	19.8	188
Northern	9.9	121	15.5	217
Western	3.4	93	13.7	147

Table 4.1.2a: The proportion of last-born children aged 0-23 months who drunk anything from a bottle with a nipple the previous day before the interview, The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/19		2019/20	
	Percentage who had Bottle feeding	Number of children	Percentage who had Bottle feeding	Number of children
Nationally				
Children 0-23 months	15.4	444	12.9	686
Child's age in months				
<6	8.5	102	9.3	175
6-8	17.1	57	17.1	82
9-11	28.4	65	27.4	96
12-17	17.6	125	14.4	178
18-23	7.1	95	5.2	155
Child's sex				
Male	9.6	210	13.1	339
Female	19.8	234	12.7	347
Sex of household head				
Male	17.0	331	14.6	516
Female	11.7	113	7.9	170
Marital status of household head				
Married	15.7	390	13.1	616
Not Married	13.5	54	10.1	70
Residence				
Rural	8.6	333	10.4	548
Urban	25.7	111	19.4	138
Regions				
Central	24.9	90	24.3	121
Eastern	11.4	128	5.8	191
Northern	11.7	130	11.1	225
Western	13.9	96	11.9	149

Table 4.1.2b: The proportion of children aged 6 to 8 months who were introduced to solid, semi-solid or soft foods (complementary feeding), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/19		2019/20	
	Percentage who were introduced to solid, semi-solid or soft foods	Number of children	Percentage who were introduced to solid, semi-solid or soft foods	Number of children
Nationally				
Children 6-8 months	11.0	97	11.9	78
Child's sex				
Male	11.2	48	13.6	42
Female	10.9	49	10.5	36
Sex of household head				
Male	7.1	66	13.3	65
Female	19.6	31	3.9	13
Marital status of the household head				
Married	12.7	89	12.7	71
Not Married	0.0	8	0.0	7
Residence				
Rural	13.1	74	14.1	68
Urban	7.2	23	0.0	10

"I believe that parents need to make nutrition education a priority in their home environment. It's crucial for good health and longevity to instill in your children sound eating habits from an early age ."

– Cat Cora

Table 4.1.3a: The proportion of children 6-23 months (breastfed and non-breastfed children) that meet the required minimum dietary diversity, The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/19		2019/20	
	Percentage who met IYCD_MDD	Number of children	Percentage who met IYCD_MDD	Number of children
Nationally				
Children 6-23 months	10.4	301	11.4	477
Child's age in months				
6-8	3.2	57	3.0	76
9-11	14.3	64	10.0	94
12-17	13.2	114	13.6	168
18-23	7.1	66	13.5	139
Child's sex				
Male	13.0	140	9.9	234
Female	8.6	161	12.4	243
Sex of household head				
Male	9.5	224	10.2	357
Female	12.9	77	14.9	120
Marital status of the household head				
Married	10.4	265	12.1	431
Not Married	10.8	36	3.0	46
Residence				
Rural	9.1	230	10.2	384
Urban	12.5	71	14.7	93
Regions				
Central	16.9	58	14.0	81
Eastern	10.9	89	16.0	125
Northern	7.7	83	8.6	166
Western	6.8	71	8.0	105

Table 4.1.3b: The proportion of breastfed children (6-23 months) that meet the required minimum dietary diversity (MDD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MDD	Number of children	Percentage who met MDD	Number of children
Nationally				
Children 6-23 months	6.0	226	9.8	364
Child's age in months				
6-8	3.5	52	3.0	68
9-11	8.0	57	9.2	87
12-17	7.1	88	11.9	137
18-23	2.5	29	12.1	72
Child's sex				
Male	9.9	103	7.5	175
Female	3.2	123	11.4	189
Sex of household head				
Male	4.2	159	10.1	280
Female	9.8	67	8.8	84
Marital status of household head				
Married	6.8	198	10.2	332
Not Married	1.0	28	4.5	32
Residence				
Rural	6.7	176	8.2	294
Urban	4.8	50	14.1	70
Regions				
Central	7.9	38	14.4	55
Eastern	4.2	70	8.9	93
Northern	4.4	67	9.2	138
Western	7.9	51	7.5	78

Table 4.1.3c: The proportion of non-breastfed children aged 6 to 23 months that meet the required minimum dietary diversity (MDD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MDD	Number of children	Percentage who met IMDD	Number of children
Nationally				
Children 6-23 months	24.4	75	16.2	113
Child's sex				
Male	22.3	37	16.7	59
Female	25.9	38	15.8	54
Sex of household head				
Male	22.3	65	10.5	77
Female	37.6	10	27.0	36
Marital status of the household head				
Married	21.0	67	18.1	99
Not Married	63.5	8	0.0	14
Residence				
Rural	17.9	54	16.2	90
Urban	32.2	21	16.4	23

“Chronic malnutrition, or the lack of proper nutrition over time directly contributes to three times as many child deaths as food scarcity. Yet surprisingly, you don’t really hear about this hidden crisis through the morning news, Twitter or headlines of major newspapers.”

— Cat Cora

Table 4.1.4a: The proportion of children 6-23 months (both breastfed and non-breastfed children aged 6 to 23 months) that meet the required minimum meal frequency (MMF), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MMF	Number of children	Percentage who met MMF	Number of children
Nationally				
Children 6-23 months	47.7	299	53.8	477
Child's age in months				
6-8	62.6	57	84.5	76
9-11	36.8	64	49.0	94
12-17	46.8	114	46.1	168
18-23	50.5	64	51.9	139
Child's sex				
Male	50.5	138	55.6	234
Female	45.8	161	52.5	243
Sex of household head				
Male	45.2	222	53.9	357
Female	54.2	77	53.3	120
Marital status of the household head				
Married	49.0	263	54.7	431
Not Married	38.5	36	43.1	46
Residence				
Rural	45.4	228	54.5	384
Urban	51.4	71	51.9	93
Regions				
Central	48.7	58	50.5	81
Eastern	33.6	87	47.0	125
Northern	53.5	83	51.8	166
Western	58.1	71	65.3	105

Table 4.1.4b: The proportion of breastfed children 6-23 months that meet the required minimum meal frequency (MMF), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MMF	Number of children	Percentage who met MMF	Number of children
Nationally				
Children 6-23 months	44.4	224	55.0	364
Child's age in months				
6-8	67.4	51	84.9	68
9-11	29.9	57	50.3	87
12-17	40.5	88	47.2	137
18-23	50.0	28	51.0	72
Child's sex				
Male	50.3	102	59.8	175
Female	40.1	122	51.7	189
Sex of household head				
Male	39.3	157	55.1	280
Female	54.6	67	54.5	84
Marital status of the household head				
Married	46.6	196	55.3	332
Not Married	30.7	28	50.4	32
Residence				
Rural	46.3	175	56.4	294
Urban	41.0	49	51.2	70
Regions				
Central	35.1	38	45.6	55
Eastern	27.7	68	46.1	93
Northern	55.4	67	58.9	138
Western	60.0	51	66.7	78

Table 4.1.4c: The proportion of non-breastfed children 6-23 months) that meet the required minimum meal frequency (MMF), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MMF	Number of children	Percentage who met MMF	Number of children
Nationally				
Children 6-23 months	58.5	75	50.2	113
Child's sex				
Male	50.4	37	44.3	59
Female	64.6	38	54.9	54
Sex of household head				
Male	59.6	65	49.8	77
Female	51.1	10	51.1	36
Marital status of the household head				
Married	56.6	67	52.8	99
Not Married	80.3	8	28.1	14
Residence				
Rural	41.7	54	48.9	90
Urban	78.6	21	53.8	23

“Breastmilk is not just food – it’s a powerful medicine tailored to the infant’s needs that can significantly reduce the risk of death.”

Table 4.1.5a: The proportion of children 6-23 months (both breastfed and non-breastfed children) that meet the required minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019	Number of children	2019/2020	Number of children
	Percentage who met MAD		Percentage who met MAD	
Nationally				
Children 6-23 months	8.0	301	8.7	477
Child's age in months				
6-8	3.2	57	2.7	76
9-11	10.2	64	8.5	94
12-17	10.7	114	7.6	168
18-23	4.9	66	12.8	139
Child's sex				
Male	8.1	140	7.3	234
Female	8.0	161	9.7	243
Sex of household head				
Male	7.8	224	6.9	375
Female	8.6	77	13.9	120
Marital status of the household head				
Married	7.7	265	9.3	431
Not Married	10.1	36	2.0	46
Residence				
Rural	5.6	230	7.4	384
Urban	11.9	71	12.0	93
Regions				
Central	16.3	58	8.3	81
Eastern	9.6	89	15.7	125
Northern	3.7	83	6.0	166
Western	2.9	71	5.2	105

Table 4.1.5b: The proportion of breastfed children 6-23 months that meet the required minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MAD	Number of children	Percentage who met MAD	Number of children
Nationally				
Children 6-23 months	4.0	226	6.7	364
Child's age in months				
6-8	3.5	52	3.0	68
9-11	3.8	57	8.0	87
12-17	6.1	88	4.7	137
18-23	0.0	29	12.1	82
Child's sex				
Male	6.0	103	4.2	175
Female	2.6	123	8.4	189
Sex of household head				
Male	3.5	159	6.2	280
Female	5.1	67	8.3	84
Marital status of the household head				
Married	4.5	198	7.0	332
Not Married	1.0	28	3.0	32
Residence				
Rural	3.9	176	5.2	294
Urban	4.3	50	10.6	70
Geographical regions				
Central	6.9	38	7.0	55
Eastern	3.4	70	8.9	93
Northern	4.4	67	7.0	138
Western	2.7	51	3.9	78

Table 4.1.5c: The proportion of non-breastfed children (6-23 months that met the minimum acceptable diet (MAD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met MAD	Number of children	Percentage who met MAD	Number of children
Nationally				
Children 6-23 months	20.7	74	14.6	113
Child's sex				
Male	14.7	36	15.6	59
Female	25.1	38	13.7	54
Sex of household head				
Male	18.4	64	9.1	77
Female	35.0	10	25.0	36
Marital status of the household head				
Married	17.3	66	16.3	99
Not Married	59.1	8	0.0	14
Residence				
Rural	11.9	53	13.9	90
Urban	31.2	21	16.4	23

If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have the safest way to health."

– Hippocrates

Table 4.1.6 The proportion of women of reproductive age (15-49 years) that meet the required minimum dietary diversity (MDD), The Uganda National Panel Survey 2018/2019 and 2019/2020.

Background Characteristics	2018/2019		2019/2020	
	Percentage who met Woman_MDD	Number of women	Percentage who met Woman_MDD	Number of women
Nationally				
Women 15-49 years	14.0	2763	11.0	3453
Woman's age in completed years				
15-19	16.6	569	6.7	943
20-29	12.1	863	12.6	1085
30-39	13.3	756	12.4	761
40-49	15.8	575	12.2	664
Sex of the household head				
Male	15.2	1878	11.7	2266
Female	11.6	885	9.8	1187
Marital status of woman				
Married	14.8	2275	12.4	1732
Not Married	10.7	488	9.5	1721
Residence				
Rural	13.5	2047	10.7	2638
Urban	14.9	716	11.7	815
Regions				
Central	14.6	645	10.2	750
Eastern	10.8	677	8.7	877
Northern	13.8	819	12.0	980
Western	16.6	622	13.1	846

Table 4.1.7 The proportion of children 6-59 months who were given Vitamin A supplements in the 6 months preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

Background characteristics	2018/2019				2019/2020			
	Percentage of children 6 -23 months who were given vitamin A in the past 6 months	Number of children 6 -23 months	Percentage of children 6 -59 months who were given vitamin A in the past 6 months	Number of children 6 -59 months	Percentage of children 6 -23 months who were given vitamin A in the past 6 months	Number of children 6-23 months	Percentage of children 6 -59 months who were given vitamin A in the past 6 months	Number of children 6-59
Child's age in months								
0-11	70.3	209	-	-	75.5	177	75.5	177
12-23	79	399	-	-	77.6	369	77.6	369
24-35	-	-	-	-	-	-	66.4	407
36-47	-	-	-	-	-	-	60.5	372
48-59	-	-	-	-	-	-	61.2	446
Child's Sex								
Male	73.1	293	-	-	77.5	263	67.2	855
Female	77.8	315	-	-	76.3	283	66.5	916
Residence								
Urban	76.2	130	-	-	78.7	111	66.1	336
Rural	75.5	478	-	-	76.3	435	67.1	1435
Geographical regions								
Central	75.7	117	-	-	74.1	101	61.5	347
Eastern	65.3	184	-	-	75.8	145	60.1	502
Northern	71.9	163	-	-	78.1	184	65.9	513
Western	89.6	144	-	-	79.7	115	79.4	408
Total	75.8	608	-	-	76.9	546	66.8	1,771

Table 4.1.8: The proportion of children 6-59 months, given deworming medication in the 6 months preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

Background characteristics	2018/19		2019/20	
	Percentage of children 12-59 months who were given deworming medication in the past 6 months	Number of children 12-59 months	Percentage of children 12-59 months who were given deworming medication in the past 6 months	Number of children 12-59 months
Child's age in months				
0-11	-	-		
12-23	57.5	407	57	379
24-35	49.1	480	50.2	414
36-47	53.6	473	45.2	383
48-59	51.3	438	51.9	480
Child's Sex				
Male	52	869	51.7	803
Female	53.4	929	50.5	853
Residence				
Urban	59.4	382	55	307
Rural	50	1,416	49.9	1349
Geographical regions				
Central	52.4	388	47.2	331
Eastern	53.4	482	47.2	479
Northern	40.4	493	42.9	466
Western	61.6	435	65.5	379
Total	52.7	1,798	51	1,656

Table 4.2 The proportion of Households that experienced food shortage in the last 12 months and the proportion of households having two or more meals including breakfast, The Uganda National Panel Surveys 2018/2019 and 2019/2020

Background characteristics	2018/2019				2019/2020			
	Less food past 12 months	Had 2 meals or less including Breakfast	More than 2 meals	Total	Less food past 12 months	Had 2 meals or less including Breakfast	More than 2 meals	Total
National	15.9	39.1	60.9	3178	14.1	37.5	62.5	3064
Residence								
Rural	18.6	46.1	53.9	2368	16.3	44.3	55.7	2321
Urban	10.6	25.4	74.6	810	9.2	22.8	77.2	744
Geographical Region								
Central	8.1	35.7	64.3	813	7.5	33.2	66.8	784
Eastern	21.9	30.1	69.9	728	24	28.94	71.06	699
Northern	23.2	51.8	48.2	895	24.1	53.14	46.86	863
Western	14.3	40.8	59.2	742	6	37.4	62.6	718
Household Headship								
Male	14.8	38.7	61.3	2079	12.5	35.8	64.2	1975
Female	17.8	39.6	60.4	1097	17.1	40.9	59.1	1089

“Nourishment is not just “nutrition.” Nourishment is the nutrients in the food, the taste, the aroma, the ambiance of the room, the conversation at the table, the love and inspiration in the cooking, and the joy of the entire eating experience.”

— Marc David

Table 4.3.1: The proportion of children age 12-23 months and 24-35 months who received DT3 & Measles Vaccination by the source of information (vaccination card or mother's report "Without a card") and household background Characteristics

Background characteristics	2018/19					2019/20				
	12-23 Months		24-35 Months			12-23 Months		24-35 Months		
	With card	Without a card	With card	Without a card		With card	Without a card	With card	Without a card	
Measles vaccination										
National	49.6	42.8	37.5	62.5	441	43.2	52.2	42.3	54.9	814
Child-sex										
Male	49.3	41.1	56.8	43.1	212	42.5	54.7	44.5	51.3	389
Female	49.8	43.9	24.8	75.2	229	43.7	50.4	40.6	57.4	425
Residence										
Urban	50.6	40.9	83.5	16.5	93	51.4	45.7	40.7	56.4	159
Rural	49.1	43.5	19.9	80.1	348	40.1	54.6	42.7	54.3	655
Household Headship										
Male	49.3	41.5	38.7	61.3	335	48.8	47.1	49	48.9	586
Female	50.4	46.7	27.7	72.5	106	30.3	63.9	26.5	68.8	228
DPT3 Vaccination										
National	51.1	40.9	37.5	62.5	441	43.6	51.1	42.5	52.9	812
Child-sex										
Male	50.6	39.6	56.9	43.1	213	42.1	55.1	44.9	50.6	389
Female	51.5	41.8	24.8	75.2	228	44.6	48.3	40.7	54.6	423
Residence										
Urban	53.6	38.2	83.5	16.5	93	51.9	45.7	41.1	54.8	159
Rural	50.1	42	19.9	80.1	348	40.4	53.1	42.9	53.3	653
Household Headship										
Male	49.7	41.4	38.7	61.3	337	49.7	46.7	48.9	49.2	585
Female	55.9	39.3	27.5	72.5	104	29.1	61.5	27.4	61.6	227

Table 4.3.2: The proportion of children who had diarrhoea 2 weeks preceding the survey, according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

Background characteristics	2018/2019				2019/2020			
	Percentage of children below 2 years with diarrhoea	Number of children below 2 years	Percentage of children below 5 years with diarrhoea	Number of children below 5 years	Percentage of children below 2 years with diarrhoea	Number of children below 2 years	Percentage of children below 5 years with diarrhoea	Number of children below 5 years
Child's age in months								
0-11	14.3	402	-	-	10.8	346	10.8	346
12-23	20.5	423	-	-	11.7	402	11.7	402
24-35	-	-	-	-	-	-	7.7	422
36-47	-	-	-	-	-	-	5.9	405
48-59	-	-	-	-	-	-	2.3	498
Child's Sex								
Male	17.1	397	-	-	11.6	373	7.6	1,014
Female	17.6	428	-	-	11.0	375	7.3	1,054
Residence								
Urban	16.5	187	-	-	10.0	154	7.5	393
Rural	17.8	638	-	-	11.8	594	7.4	1680
Geographical regions								
Central	23.6	164	-	-	14.3	140	8.1	406
Eastern	14.2	241	-	-	8.7	209	6.3	597
Northern	19.0	224	-	-	14.7	233	11.7	578
Western	14.5	196	-	-	7.9	165	4.6	491
Total	17.3	825	-	-	11.3	748	7.4	2,073

Table 4.3.4: The proportion of children who had diarrhoea 2 weeks preceding the survey, received treatment for diarrhoea according to background characteristics, Uganda National Panel Surveys 2018/2019 and 2019/2020

	2018/2019						2019/2020					
Background characteristics	Percentage of children below 2 years with diarrhoea who were given:		Number of children below 2 years with diarrhoea	Percentage of children below 5 years with diarrhoea who were given:		Number of children below 5 years with diarrhoea	Percentage of children below 2 years with diarrhoea who were given:		Number of children below 2 years with diarrhoea	Percentage of children below 5 years with diarrhoea who were given:		Number of children below 5 years with diarrhoea
	Recommend- ed home fluids (RHF)	ORS and Zinc		Recommend- ed home fluids (RHF)	ORS and Zinc		Recommend- ed home fluids (RHF)	ORS and Zinc		Recommend- ed home fluids (RHF)	ORS and Zinc	
Child's age in months												
0-11	5.8	31.7	70	-	-	-	6.4	47.0	47	6.4	47.0	47
12-23	15.2	54.8	87	-	-	-	14.0	50.4	58	14.0	50.4	58
24-35	-	-	-	-	-	-	-	-	-	7.1	29.0	39
36-47	-	-	-	-	-	-	-	-	-	17.8	68.7	24
48-59	-	-	-	-	-	-	-	-	-	5.7	34.4	15
Child's Sex												
Male	8.6	47.9	74	-	-	-	15.6	50.6	61	13.2	53.7	98
Female	13.3	42.9	83	-	-	-	6.2	47.4	44	8.3	40.7	85
Residence												
Urban	8.2	54.4	32	-	-	-	5.1	65.2	23	6.5	63.9	45
Rural	12.7	40.8	125	-	-	-	12.3	43.6	82	12.0	40.9	138
Geographical regions												
Central	17.5	41.8	39	-	-	-	7.7	29.6	21	5.0	33.1	36
Eastern	4.3	53.1	44	-	-	-	8.4	57.8	25	5.5	56.4	46
Northern	10.1	46.3	38	-	-	-	13.7	62.3	40	18.3	55.3	69
Western	11.6	39.9	36	-	-	-	12.7	48.9	19	11.7	40.0	32
Total	11.3	45.1	157	-	-	-	10.6	48.9	105	10.6	46.8	183

Table 4.3.4: The proportion of children under age 5 with symptoms of fever in the 2 weeks preceding the survey and percentage for whom advice or treatment was sought for fever

Background Characteristics	2018/19		2019/20		2018/19		2019/20	
	Percentage with symptoms of fever in the 2 weeks preceding the survey	Number of children	Percentage with symptoms of fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought for fever	Number of children	Percentage for whom advice or treatment was sought for fever	Number of children
National								
Children 0-59 months	26.1	744	25.2	2099	95.6	292	94.1	725
Child's age in months								
<12	23.1	231	24.6	366	98.1	76	91	120
12-23	27.2	271	28	394	93.3	111	96.5	157
24-35	23.4	64	28.8	440	97.7	27	94.6	161
36-47	29.7	89	23.2	400	93.3	33	98.5	122
48-59	28.7	89	22	499	97.6	45	91.1	165
Child's sex								
Male	20.5	358	22.2	1034	95.1	134	94.9	334
Female	30.5	386	27.8	1065	96	158	93.5	391
Sex of household head								
Male	26	553	25.4	1543	94.8	208	95.9	552
Female	26.4	191	24.8	556	97.4	84	89.1	173
Marital status of the household head								
Married	25.3	658	25.2	1856	95	253	93.7	644
Not Married	30.7	86	25	243	99.2	39	97.3	81
Residence								
Urban	16.9	168	22.6	396	94.9	52	93	126
Rural	30.8	576	26.1	1703	95.9	240	94.4	599
Regions								
Central	23.4	143	18.7	413	94.9	48	92.8	134
Eastern	39.9	223	32.8	601	97.7	113	94	223
Northern	19.2	208	34.8	587	95.8	70	99.6	207
Western	17.9	170	16.9	497	92.6	61	90.2	160

Table 4.3.5: The proportion of children under 5 years who slept under a mosquito net last night (night preceding interview)

Background Characteristics	2018/19		2019/20	
	Percentage who slept under a mosquito net last night (night preceding survey)	Number of children	Percentage who slept under a mosquito net last night (night preceding survey)	Number of children
National	83.2	1999	81.2	2081
Child's age in months				
<12	85.9	354	88.2	361
12-23	87.8	377	83.5	390
24-35	79.7	414	77.3	435
36-47	83.3	417	79.4	398
48-59	79.6	437	78.5	497
Child's sex				
Male	81.2	963	82	1026
Female	84.9	1036	80.6	1055
Sex of household head				
Male	82.3	1487	83.1	1529
Female	85.5	512	75.8	552
Marital status of the household head				
Married	82.8	1768	83.1	1842
Not Married	85.2	231	64.3	239
Residence				
Urban	90.4	438	87.3	1693
Rural	79.8	1561	79.2	388
Regions				
Central	82.2	418	82.4	408
Eastern	86.1	554	83.9	596
Northern	76.3	547	78.3	577
Western	86	480	79.8	499



©UNICEF

05

Nutrition Sensitive Indicators

This chapter focuses on food availability, food expenditure, water, sanitation and hygiene (WASH) in household levels. It provides information of the household's food group expenditure patterns, access and use safe drinking water (water), utilization facilities that provide for safe disposal of human excreta (sanitation) and practice handwashing after utilization of sanitation facilities (hygiene).

Summary of Key Findings



A reduction in the proportion of households that faced a situation where they didn't have enough food to feed the households declined from **15.9%** in 2018/19 to **14.1%** in 2019/20 respectively.



The highest proportion of food expenditure was towards staple foods (cereals, roots and tubers) at **41.7%** in 2018/19 and **40.8%** in 2019/20



The proportion of children that received meals at school was **47.5%** and **46.3%** in 2018/19 and 2019/20 respectively. The proportion of children that received meals at school was higher among urban households compared to rural households.



The proportion of household with access to an improved drinking water source increased from **80.9%** to **83.4%** in 2018/19 and 2019/20 respectively.



The proportion of households whose distance to the nearest water source was less than 200m remained similar between 2018/19 and 2019/20 at **40.9%** and **40.2%** respectively.



A noticeable decline in the proportion of households whose wait time that was less than 20 minutes at the main source of drinking water was observed from **66.0%** in 2018/19 to **51.1%** in 2019/20 respectively.



Overall, the proportion of households with handwashing facilities that had soap and water reduced from **6.5%** in 2018/19 to **5.0%** in 2019/20.

5.1 Food availability and expenditure

5.1.1 Food shortage

Over the past decade, Uganda has increased its commitment to addressing food security to end hunger and malnutrition. The UNPS collected data about a situation lack of enough food to feed the household in the 12 months preceding the survey. The findings showed a reduction in the proportion of households that faced a situation where they didn't have enough food to feed the households from 15.9% in 2018/19 to 14.1% in 2019/20 respectively. See *graph 5.1.1 and Table 5.1.1*

- The proportion was higher in rural households (18.6% and 16.3%) compared to urban households (10.6% and 9.2%) despite a decline for both categories over the two rounds of the panel 2018/19 and 2019/20 respectively.
- The Northern and Eastern regions had the highest proportion of households that were faced with a condition of lack of enough food in the 12 months preceding the study. These regions were the only regions where an increase in this proportion was observed between 2018/19 and 2019/20. The most noticeable decline in the proportion was observed in Western Uganda from 14.3% in 2018/19 to 6.0% in 2019/20.

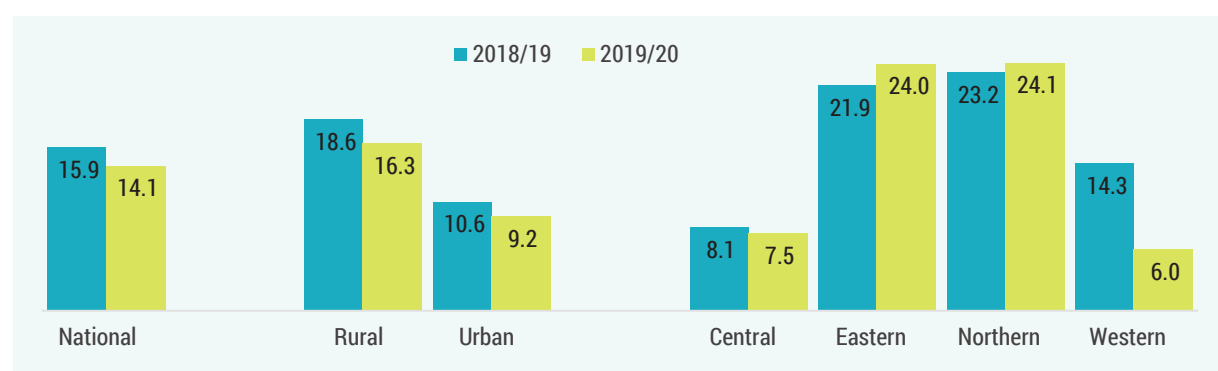
- During both rounds of the panel, the proportion was lower in male-headed households than female-headed households 14.8% vs 17.8% and 12.5% vs 17.1% during 2018/19 and 2019/20 respectively

5.1.2 Food expenditure

Household income expenditure on food groups provides an insight into the household expenditure on food diversity. This helps to predict the availability of diverse foods during meals (dietary diversity) influencing nutrition outcomes for both children and adults. The UNPS data were categorized into 6 main groups and 12 sub-group. The main groups were Fats and Sugars (subgroups Oils & fats and Sugars & Honey), Condiments, Plant protein, Fruits and Vegetables (subgroups Fruits and Vegetables), Animal source foods (subgroups Meats, Eggs, Fish & Seafood, Milk & Milk products) and Staple foods (subgroups Cereals, Roots and Tubers). The UNPS findings revealed that nationally, the highest proportion of food expenditure was towards staple foods (41.7% in 2018/19 and 40.8% in 2019/20. This highlights a priority on stomach-filling foods during food budget allocation. See *graph 5.1.2 and Table 5.1.2*

- Animal source foods took up the second-highest allocation of households' food expenditure. Whereas the proportion of food expenditure allocation to plant protein was similar to the allocation for condiments in 2018/10 (10.8%

FIGURE 5.1.1: TRENDS IN THE PROPORTION OF HOUSEHOLDS THAT WERE FACED WITH A SITUATION OF LACK OF ENOUGH FOOD WITHIN THE PREVIOUS 12 MONTHS



vs 10.6% respectively), in 2019/20, an increase in the proportion allocated to condiments was observed to 15.4%. Condiments accounted for the third-highest allocation of the food budget in 2019/20.

- Male headed households allocated less to staple foods compared to female head households, 40.7% vs 43.8% and 49.1% vs 44.1% in 2018/19 and 2019/20 respectively.
- Households in the Western region had the highest proportion (49%) of food expenditure on staples during 2018/19, during 2019/20, households in the Eastern region had the highest proportion allocated to staple foods, 44.6%.
- Households in the Western region also had the least proportion of household food expenditure allocated to animal source foods in both rounds of the panel, 17.2% and 18.3% during 2018/19 and 2019/20 respectively. The region also spent the least on fruits and vegetables.
- Households in the Northern region had the highest proportion of household food expenditure allocated to fruits and vegetables

at 12.9% and 11.0% in 2018/19 and 2019/20 respectively.

5.2 Nutrition in education and sports

5.2.1 Meals at school

Provision of meals at school for children helps to reduce hunger and nutritional deficiencies. Further, it also improves attendance, attentiveness and academic performance. The UNPS also collected data on meals provisions at school for school going children (day scholars) aged 6-12 years. The findings revealed that 47.5% and 46.3% of school-going children received meals at schools. The proportion of children that received meals at school was higher among urban households compared to rural households, 58.2% vs 43.8% and 60.1% vs 41.9% in 2018/19 and 2019/20 respectively. See *graph 5.2.1 and Table 5.2.1*.

- The Central region had the highest proportion of that received meals at school children (65.9% in 2018/19 and 67.1% in 2019/20) while the Northern region had the least (25.0% in 2018/19 and 26.2% in 2019/20).

FIGURE 5.1.2: TRENDS IN THE PROPORTION OF HOUSEHOLDS' FOOD EXPENDITURE BY FOOD GROUP

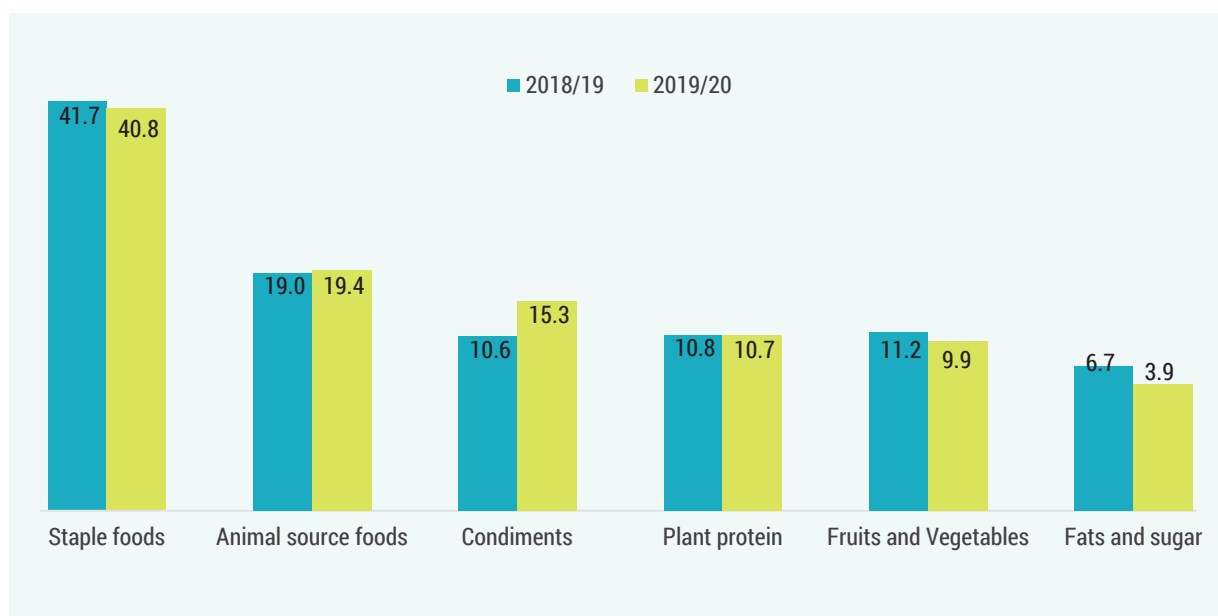
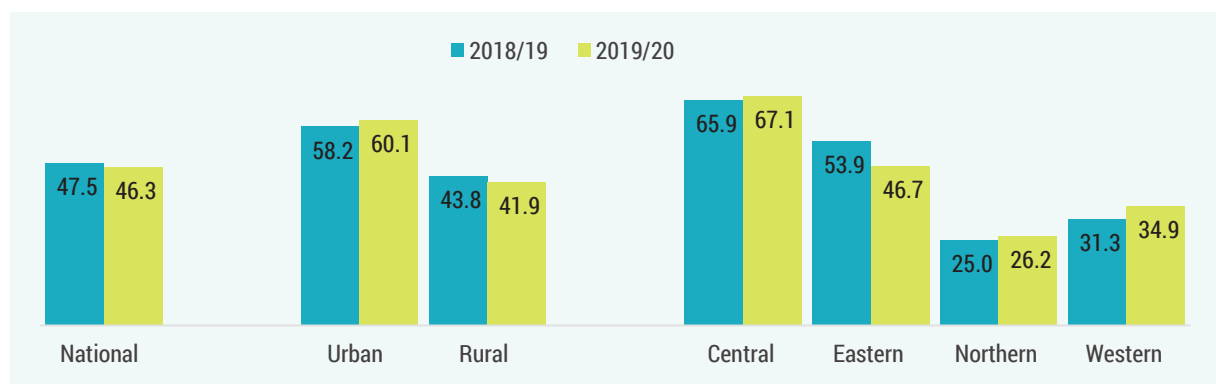


FIGURE 5.2.1: TRENDS IN THE PROPORTION OF SCHOOL-GOING CHILDREN 6-12 YEARS HAVING MEALS AT SCHOOL



5.3 Nutrition in water, hygiene and sanitation services

5.3.1 Access to improved sources of drinking water

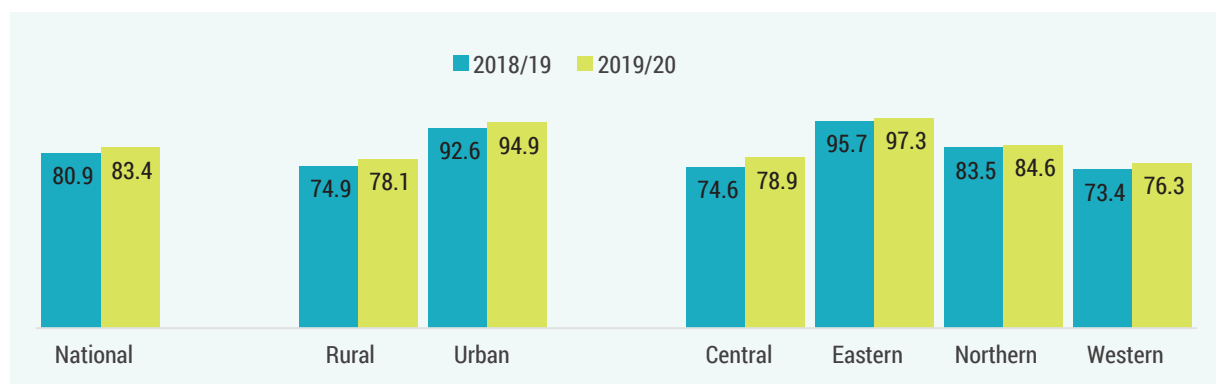
Improving water, sanitation, and hygiene (WASH) indirectly improves nutrition outcomes through the reduction of diarrheal diseases, parasitic infections, and environmental causes of intestinal inflammation. Access and use of improved water sources reduce the prevalence of waterborne disease and the burden of service delivery through increased demand for health care. Improved sources of drinking water include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, and rainwater. See graph 5.3.1 and Table 5.3.1a/b

- The UNPS data revealed an increase in the

proportion of household with access to an improved drinking water source from 80.9% to 83.4% in 2018/19 and 2019/20 respectively. The proportion was higher in the urban areas and the Eastern region during both rounds of the panel.

- Management of safe water sources by Committees was a decline from 47.2% to 44.1% in 2018/19 and 2019/20 respectively. Households in the Western region had the least proportion of safe water sources managed by User Committees during both rounds of the panel, 34.0% in 2018/19 and 30.2% in 2019/20 respectively. The highest proportion was observed in Eastern Uganda at 61.3% in 2018/19 and 57.9% in 2019/20.

FIGURE 5.3.1: TRENDS IN THE PROPORTION OF HOUSEHOLD WITH ACCESS TO IMPROVED SOURCES OF DRINKING WATER IN THE PANEL

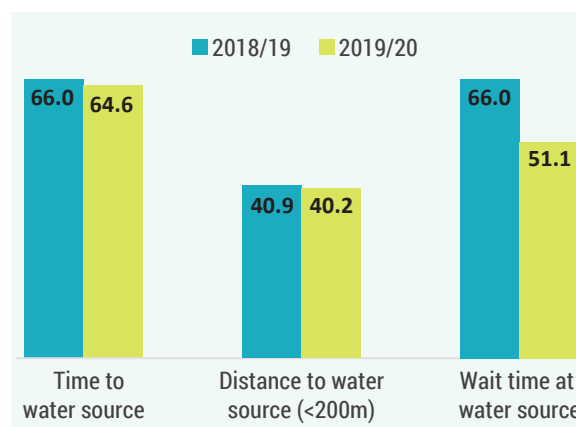


5.3.2 Drinking water source dynamics

The distance travelled to the water source, the time taken to reach the water source and the wait time at the water source is sensitive to nutrition because the more time a mother spends at the water source, the less time she has available to tend to the nutrition needs of her children. The UNPS collect information on the distance to the water source (less than 200km), length of time to the water source (less than 30 minutes) and waiting time at the water source (less than 20 minutes) for households in the panel as regards the main water source of drinking water. See graph 5.3.2 and Table 5.3.1a/b.

- The proportion of households whose distance to the nearest water source was less than 200m remained similar between 2018/19 and 2019/20 at 40.9% and 40.2% respectively. Compared to urban areas, the proportion of households whose travel time to the drinking water source was less than 200m was lower during both rounds of the panel, 33.6% vs 61.6% in 2018/19 and 30.9% vs 69.4% in 2019/20. The Northern region had the least proportion of households who travelled less than 200m to the main source of drinking water, 37.8% and 32.4% in 2018/19 and 2019/20 respectively.
- The proportion of households whose time to the water source took less than 30 minutes slightly decreased from 66.0% in 2018/19 to 64.6% in 2019/20 respectively. The proportion was higher in rural areas as compared to urban areas, 70.8% vs 56.8% and 73.3% vs 58.1% in 2018/19 and 2019/20 respectively.
- A noticeable decline in the proportion of wait time that was less than 20 minutes at the main source of drinking water was observed from 66.0% in 2018/19 to 51.1% in 2019/20 respectively. The proportion was also higher among rural households 59.4% vs 45.3% in 2018/19 and 57.6% vs 47.0% in 2019/20. The proportion was also the least in the Northern region.

FIGURE 5.3.2: TRENDS IN THE PROPORTION OF HOUSEHOLD WATER SOURCE DYNAMICS IN THE PANEL

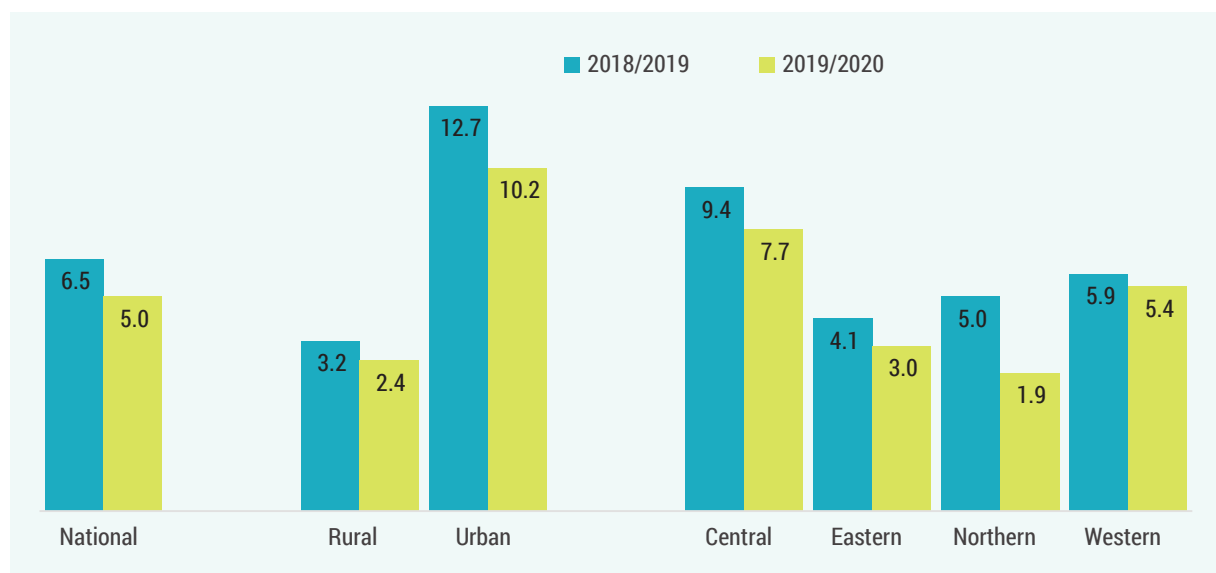


5.3.3 Handwashing using soap and water

Handwashing with soap reduces poor nutrition outcomes through the prevention of diarrhoeal diseases and helminths infections making it critical to achieving and maintaining good nutrition. The UNPS collected data on the availability of handwashing facilities with soap and water at the toilet of households. Overall, the proportion of households with handwashing facilities that had soap and water reduced from 6.5% in 2018/19 to 5.0% in 2019/20. See graph 5.3.3 and Table 5.3.3.

- The proportion of households in with handwashing facilities that had soap and water was higher in urban areas compared to rural areas, 12.7% vs 3.2% in 2018/19 and 10.2% vs 2.4% in 2019/20.
- The Central region had the highest proportion of households that had a handwashing facility with both soap and water while the Northern region had the least proportion.
- The proportion of male-headed households with a handwashing facility that had both soap and water was higher than the respective proportion for female-headed households, 65.5% vs 34.5% and 66.7% vs 33.3% in 2018/19 and 2019/20 respectively.

FIGURE 5.3.3: TRENDS IN THE PROPORTION OF HOUSEHOLD USING SOAP AND WATER FOR HANDWASHING IN THE PANEL



5.3.4 Improved toilet facilities

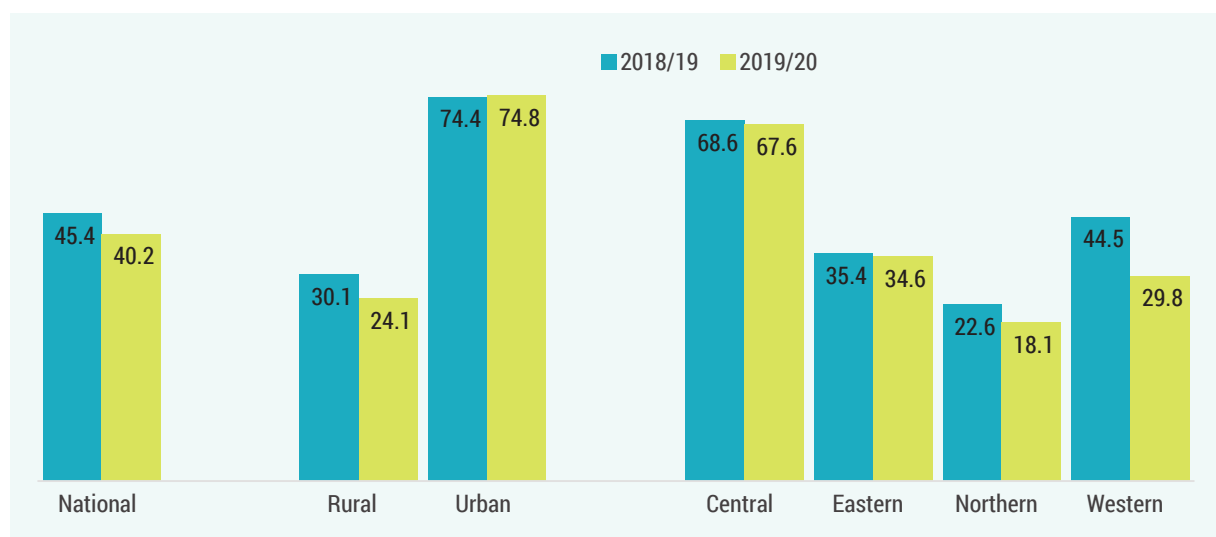
Access to improved toilet facilities helps to ensure proper hygiene and sanitation through proper disposal human waste preventing related diseases. The UNPS data showed a slight reduction in the access to improved toilet facilities from 45.4% to 40.2%. See graph 5.3.3 and Table 5.3.1b.

- The proportion of households with access

to improved toilet facilities was lower in rural compared to urban area, 30.1% vs 74.4% in 2018/19 and 24.1% vs 74.8% in 2019/20.

- A decline in access to improved toilet facilities was observed between the two rounds of the panel among households in the rural areas and notably in the Northern and Western regions.

FIGURE 5.3.4: TRENDS IN THE PROPORTION OF HOUSEHOLD HAVING ACCESS TO IMPROVED TOILET FACILITIES IN THE PANEL



LIST OF TABLES

Table 5.1.1: The proportion of Households that experienced food shortage in the last 12 months and the proportion of households having two or more meals including breakfast, The Uganda National Panel Surveys 2018/2019 and 2019/2020

Background Characteristics	2018/2019				2019/2020			
	More than 2 meals	Had 2 meals or less including Breakfast	More than 2 meals	Total	Less food past 12 months	Had 2 meals or less including Breakfast	More than 2 meals	Total
National	15.9	39.1	60.9	3178	14.1	37.5	62.5	3064
Residence								
Rural	18.6	46.1	53.9	2368	16.3	44.3	55.7	2321
Urban	10.6	25.4	74.6	810	9.2	22.8	77.2	744
Geographical Region								
Central	8.1	35.7	64.3	813	7.5	33.2	66.8	784
Eastern	21.9	30.1	69.9	728	24	28.94	71.06	699
Northern	23.2	51.8	48.2	895	24.1	53.14	46.86	863
Western	14.3	40.8	59.2	742	6	37.4	62.6	718
Household Headship								
Male	14.8	38.7	61.3	2079	12.5	35.8	64.2	1975
Female	17.8	39.6	60.4	1097	17.1	40.9	59.1	1089



©UNICEF

“Our body is the only one we’ve been given, so we need to maintain it; we need to give it the best nutrition.”

– Trudie Styler

Table 5.1.2 The proportion of household food expenditure on food groups, Uganda National Panel Surveys 2018/2019 and 2019/2020

Background Characteristics	Geographical region						
	National	Rural	Urban	Central	Eastern	Northern	Western
2018/2019							
Observations	3169	2362	807	810	727	890	742
Cereals	17.2	16.7	18.2	15.3	21.1	17.5	15.8
Roots & Tubers	24.5	27.2	19.3	23.6	21.5	18	33.2
Vegetables	7.2	7.5	6.6	5.5	8.7	8.4	7
Fruits	4	4	3.9	5.1	3.7	4.5	2.6
Animal Protein	10	9.7	10.6	9.5	10.1	11	9.8
Eggs	0.8	0.8	0.8	1.1	0.6	0.9	0.6
Fish and Sea foods	4.4	4.7	3.8	4.1	6.1	6	2
Plant Protein	10.8	11.8	9	8.2	8.6	13.9	13.3
Milk and Milk products	3.7	3.2	4.8	4.2	3.5	1.7	4.9
Oils and Fats	2.2	2.1	2.2	1.9	2.7	3.3	1.3
Sugars and Honey	4.5	4.2	5.2	5.7	5.4	4.3	2.7
Condiments	10.6	8.1	15.6	15.8	8	10.4	6.8
2019/2020							
Observations	3054	2311	743	782	696	860	716
Cereals	15.8	15.5	16.5	14.1	20.6	17.1	12.7
Roots & Tubers	25.1	27.6	19.7	27.9	23.9	14.4	30.9
Vegetables	7.4	7.9	6.2	6.3	8.5	8.4	7
Fruits	2.5	2.5	2.5	2.9	2.4	2.6	2
Animal Protein	10.2	9.7	11.1	8.9	10.6	11.1	10.6
Eggs	0.7	0.6	0.8	0.8	0.5	0.8	0.5
Fish and Sea foods	4.8	5	4.3	4.9	6.2	6.6	2
Plant Protein	10.7	11.9	8.3	8	7.8	14.6	13.3
Milk and Milk products	3.8	3.5	4.5	4.1	3.4	2	5.2
Oils and Fats	2	1.9	2.1	2	2.4	2.8	0.9
Sugars and Honey	1.9	1.5	2.7	2.5	1.4	2	1.4
Condiments	15.3	12.5	21.3	17.6	12.1	17.6	13.4
Observations	3054	2311	743	782	696	860	716

Table 5.2.1: The proportion of school going children aged 6-12 years having meals at school

Background Characteristics	2018/19		2019/20	
	Proportion of school-going children aged 6-12 years having meals at school	Number of children	Proportion of school-going children aged 6-12 years having meals at school	Number of children
National	47.5	2994	46.3	2826
Child's sex				
Male	47.3	1416	46.3	1327
Female	47.6	1578	46.3	1499
Sex of household head				
Male	50.4	2085	44.7	1981
Female	41.5	909	49.9	845
Marital status of the household head				
Married	48.7	2429	44.7	2305
Not Married	43.1	565	52.9	521
Residence				
Urban	58.2	607	60.1	529
Rural	43.8	2387	41.9	2297
Regions				
Central	65.9	755	67.1	695
Eastern	53.9	864	46.7	809
Northern	25	632	26.2	620
Western	31.3	743	34.9	702

Table 5.3.1b: The proportion of households with access to water and sanitation, Uganda National Panel Surveys 2018/2019 and 2019/2020

	2018/19						2019/20					
	Improved Source of Drinking Water	Access to Piped Water	Improved Toilet facilities	Appropriate Water treatment	Distance to the water source (<200m)	Total	Improved Source of Drinking Water	Access to Piped Water	Improved Toilet facilities	Proper Water treatment	Distance to the water source (<200m)	Total
National	80.9	61.1	45.4	49.5	40.9	3179	83.4	60.1	40.2	47.7	40.2	3031
Residence												
Rural	74.9	51.5	30.1	42.9	33.6	2369	78.1	51.9	24.1	38	30.9	2293
Urban	92.6	79.5	74.4	62.4	61.6	810	94.9	80.1	74.8	68.6	69.4	738
Geographical area												
Central	74.6	57.7	68.6	81	48.7	813	78.9	57.3	67.6	80.5	44.3	770
Eastern	95.7	78.2	35.4	28	28.8	728	97.3	74.5	34.6	29.1	34.6	697
Northern	83.5	67	22.6	10.1	37.8	896	84.6	68.5	18.1	7.2	32.4	857
Western	73.4	45.6	44.5	61.4	47.4	742	76.3	48.1	29.8	55.9	48.2	707
Household Headship												
Male	81.7	60.5	45.3	46.6	40.9	2078	83.4	59.5	37.9	44.8	41.2	1953
Female	79.2	62.1	45.8	55.5	40.8	1099	83.5	63.7	44.5	53.4	38.2	1078

Table 5.3.21b: The proportion of households by source of drinking water, using various methods to treat water and access to toilet facilities, The Uganda National Panel Surveys 2018/2019 and 2019/2020

	2018/2019			2019/2020		
	Rural	Urban	Total	Rural	Urban	Total
Improved sources						
Piped water	4.8	34.0	308	4.7	32.8	280
Tap water	7.2	25.2	398	8.9	31.9	421
Borehole	39.1	19.9	1,175	38.4	15.5	1132
Protected well/spring	20.4	11.4	602	21.8	11	555
Gravity flow scheme	0.7	0.7	34	1.2	0.1	27
Rainwater	2.6	1.3	58	3	3.6	88
Un-improved Sources						
Un-Protected Well/spring	19.6	4.2	442	16.8	26	393
River/Lake	3.9	0.5	112	3.8	1	101
Toilet Facilities						
Flush to sewer system	0.2	11.3	70	1.1	7.7	61
Pit latrine with slab	25.9	48.1	857	18.4	47.8	667
Open Pit latrine	66.6	37.1	1979	69.2	23.8	1858
No facility/bush	6.9	3.2	261	6.5	1	231
Water treatment before drinking						
Boil and filter	3.2	10.9	129	3.1	9.4	120
Boil only	35.7	49.2	1,047	31.7	57.9	983
Filter only	1.0	0.5	28	0.8	0.1	27
Nothing is done	56.6	34.9	1,892	61.9	30.7	1832

Table 5.3.3: The proportions of households using soap and water for handwashing, drinking five litres or more of water, time to the nearest water source, wait time at the water source and safe water sources that are user committee managed

Disaggregation	Handwashing with soap and water	Household drinking 5 litres or more	Time to the water source	Wait time at the water source	Safe water source user committee managed	Total observations
2018/2019						
National	6.5	48.7	66	66	47.2	3242
Residence						
Rural	3.2	51.8	70.8	59.4	50.4	2415
Urban	12.7	42.6	56.8	45.3	40.5	825
Geographical area						
Central	9.4	36.1	57.1	53.4	39.5	836
Eastern	4.1	52.5	79.7	55.3	61.3	742
Northern	5	75.1	73.8	48.4	59.2	904
Western	5.9	40.1	59	60	34	760
2019/2020						
National	5	52.2	64.6	51.1	44.1	2899
Residence						
Rural	2.4	53	73.3	57.6	48.1	2357
Urban	10.2	41.2	58.1	47	35.5	756
Geographical area						
Central	7.7	39.8	51.6	51	38.1	786
Eastern	3	60	72.5	51.4	57.9	708
Northern	1.9	75.7	76.2	37.7	56.7	872
Western	5.4	42.9	64.6	60.8	30.2	730

“Water is the most neglected nutrient in your diet, but one of the most vital.”

– Julia Child

DEFINITION OF TERMS

A **Household** is defined as a person or group of people who have been living and eating their meals together for at least 6 of the 12 months preceding the interview.

Household Head is defined as the person who manages the income earned and the expense incurred by the household and is considered by other members of the household as the head.

An **Original household** is household that was found in same location as during the 2005/06 UNHS.

Shifted households are households that shifted from their original location in 2005/06 to any other place; either within the same Enumeration Area or outside the Enumeration Area.

Movers are individuals related to the household head that permanently left their original households to either join an existing or form a new household.

Split-Off households are new households that were formed, or already existing households joined by the Movers.

Attrition of households occurs when cases are lost from the original sample over time or over a series of sequential processes.

A **Tracking Target** is an individual(s) within the 20 percent sample of households that were selected for tracking and is related to the household head.

Household Size refers to the number of usual members in a household as of the date of the survey.



©UNICEF

“Managing perfect body weight is not a complicated rocket science. Our body is made up of food which we eat during our day to day life. If we are overweight or obese at the moment then one thing is certain that the food which we eat is unhealthy.”

– Subodh Gupta

OFFICE OF THE PRIME MINISTER

Plot 9-11 Apollo Kaggwa Road, P. O. Box 314, Kampala Uganda.

☎ +256-414-000000 ✉ ps@opm.go.ug 🌐 www.opm.go.ug 🐦 @NipnOpm

ISBN 978-9913-638-00-5

