



THE REPUBLIC OF UGANDA

Food Security and Nutrition Assessment in Northern Uganda and West Nile



KEY FINDINGS

2019



DEVELOPMENT INITIATIVE
FOR NORTHERN UGANDA (DINU)

unicef 
for every child





THE REPUBLIC OF UGANDA

Food Security and Nutrition Assessment in Northern Uganda and West Nile

Key Findings 2019

Uganda Bureau of Statistics
Kampala, Uganda

Makerere University School of Public Health
Kampala, Uganda

UNICEF Uganda
Kampala, Uganda

January 2020



DEVELOPMENT INITIATIVE
FOR NORTHERN UGANDA (DINU)

unicef 
for every child



The publication is part of the evaluation for the EU-UNICEF Joint Nutrition Action under the Development Initiative for Northern Uganda (DINU) of the United Nations Children Fund (UNICEF).

Required citation:

Uganda Bureau of Statistics (UBOS), Makerere University School of Public Health (MakSPH) and UNICEF 2020. *Situation of Food Security and Nutrition Assessment in Northern Uganda and West Nile 2019. Kampala, Uganda*

The 2019 Food Security and Nutrition Assessment in Northern Uganda (2019 FSNA) was implemented by the Makerere University School of Public Health (MakSPH) under the aegis of Uganda Bureau of Statistics and UNICEF. Data collection took place from 23rd May – 14th July, 2019. Funding for the survey was provided by the European Union (EU) and UNICEF.

Additional information about the 2019 FSNA may be obtained from the Socio-Economic Survey Section, Uganda Bureau of Statistics (UBOS), Colville Street, P.O .Box 7186, Kampala, Uganda.

Additional information about the 2019 FSNA may be obtained from the UNICEF Uganda Country Office, George Street, P.O. Box 7047, Kampala, Uganda.

Cover photograph: UNI194063

Table of Contents

About the 2019 FSNA	7
HOUSING AND RESPONDENTS CHARACTERISTICS	9
HOUSEHOLD COMPOSITION	9
WATER, SANITATION AND HYGIENE	9
EDUCATION.....	10
HOUSEHOLD DURABLE GOODS.....	10
WOMEN’S EXPOSURE TO MASS MEDIA.....	10
DISABILITY AND POLYGAMY	10
ALCOHOL CONSUMPTION BY WOMEN	11
COOKING FUEL.....	11
FOOD SECURITY	12
HOUSEHOLD FOOD SECURITY SITUATION USING CONSOLIDATED APPROACH TO REPORTING INDICATORS (CARI).....	12
HOUSEHOLD FOOD SECURITY SITUATION USING FOOD CONSUMPTION SCORE.....	12
HOUSEHOLD FOOD SECURITY SITUATION USING LIVELIHOOD COPING STRATEGIES.....	12
HOUSEHOLD FOOD SECURITY SITUATION USING FOOD EXPENDITURE SHARE.....	12
MATERNAL AND CHILD HEALTH	14
ANTENATAL CARE	14
ANC 4 VISIT.....	14
COMPONENTS OF ANC CARE.....	15
IFA INTAKE AND DEWORMING BY WOMEN	15
VACCINATION	15
DEWORMING AND VITAMIN A SUPPLEMENTATION	16
CHILDHOOD ILLNESS.....	17
EARLY CHILDHOOD DEVELOPMENT	19
CHILDREN’S BOOKS AND PLAYTHINGS.....	19
INADEQUATE CARE FOR CHILDREN	19
EARLY CHILD DEVELOPMENT INDEX.....	19
MATERNAL, INFANT AND YOUNG CHILD FEEDING	20
WOMEN DIETARY DIVERSITY	20
BREASTFEEDING	20
COMPLEMENTARY FEEDING.....	21

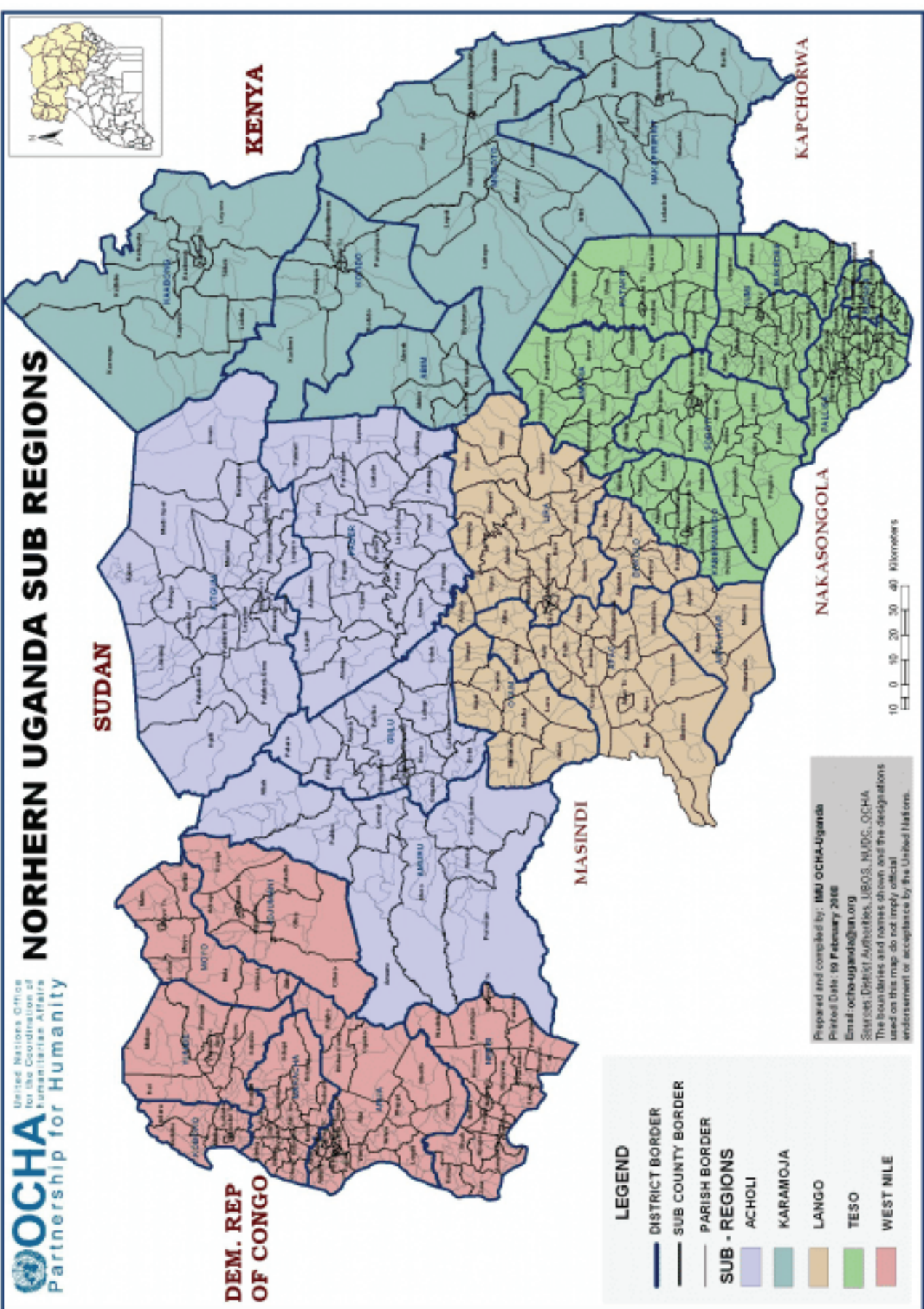
NUTRITIONAL STATUS OF WOMEN AND CHILDREN.....	23
STUNTING	23
WASTING	24
WOMEN NUTRITION.....	24
ANAEMIA IN WOMEN AND CHILDREN	25

About the 2019 FSNA

The 2019 Food Security and Nutrition Assessment (FSNA) is part of the evaluation of the EU-UNICEF Joint Nutrition Actions under the broader framework of the Development Initiative for Northern Uganda (DINU). The survey was implemented by Makerere University School of Public Health (MaKSPH) under the aegis of Uganda Bureau of Statistics (UBOS) and UNICEF. The survey was carried out by UNICEF and funded by the European Union (EU). The Food Security and Nutrition Assessment (FSNA) is the first assessment in ten districts of the Northern Uganda. The primary objective of the 2019 FSNA is to provide up-to-date estimates of basic demographics, food security and nutrition indicators. The FSNA provides a comprehensive estimate of food security and nutrition at household level and among women and children in selected countries in Northern Uganda. The FSNA provides reliable estimates from the regional and district level representative data for food security, dietary and feeding practices, maternal and child health, nutritional status and anaemia among children under the age of five and women of reproductive age.

FSNA is a cross-sectional survey with a two-stage, stratified, probability proportional to size cluster sampling design. Survey questions were administered at household and individual levels. The household questionnaire captured information on the socio-economic characteristics, water, sanitation and hygiene facilities and food security in the households. Individual questionnaire data were collected on maternal, infant and young child feeding practices, dietary diversity, child morbidity status, health seeking behaviour, access to and use of mass media and early childhood development of children. Data on the nutritional status and anaemia situation among children and women was also collected. The Computer Assisted Personal Interview (CAPI) tool was used to collect the data in May-June 2019. A total of 5,170 households were selected for the sample, of which 5,312 households were interviewed, yielding a response rate of 103 per cent. In the interviewed households, 6,295 women were eligible for the individual interview, of whom 5,312 were interviewed, yielding a response rate of 84 per cent.

NORTHERN UGANDA SUB REGIONS



HOUSING AND RESPONDENTS CHARACTERISTICS

HOUSEHOLD COMPOSITION

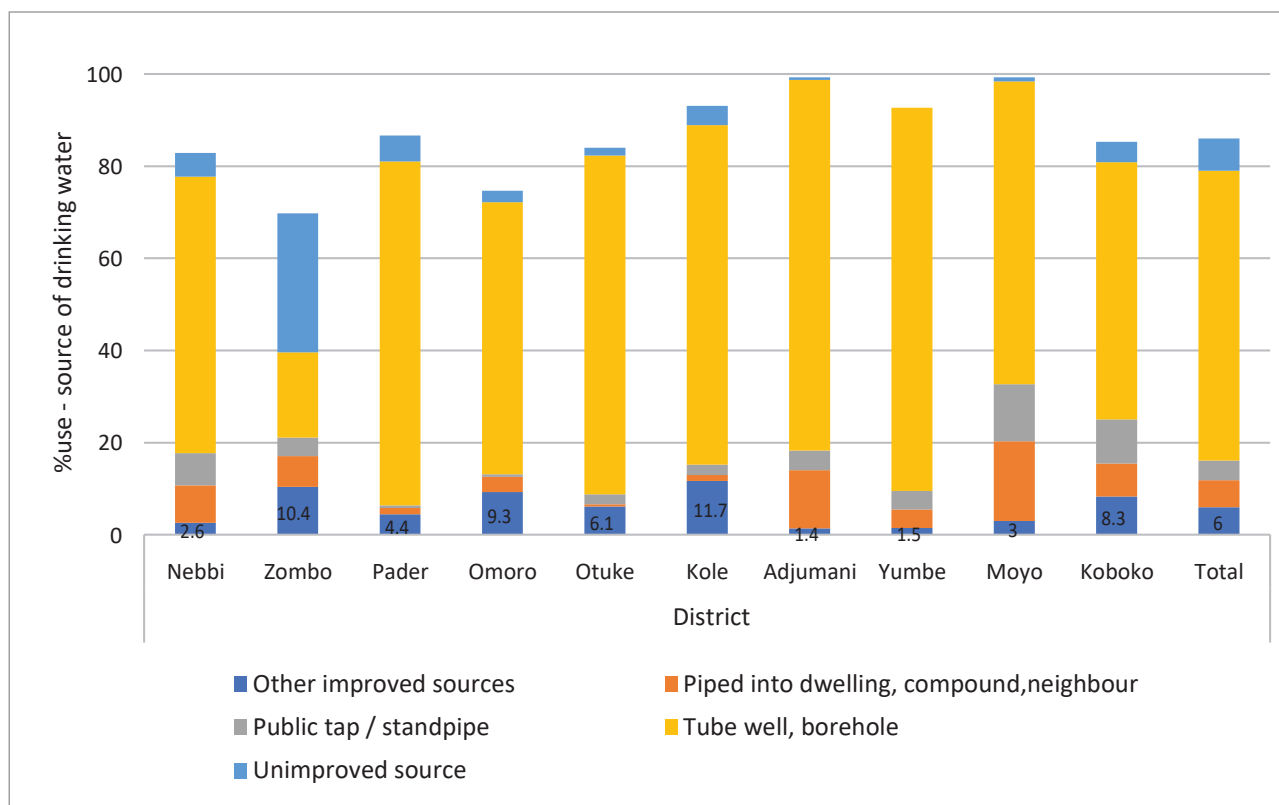
Children under five and 15 years constituted 23 percent and 50 percent, respectively, of the population within the surveyed area. The adolescent age (15-19 years) population constituted 19.7 per cent of the total population. Less than 1 in 6 households are headed by females. The average household size was 4.7.



WATER, SANITATION AND HYGIENE

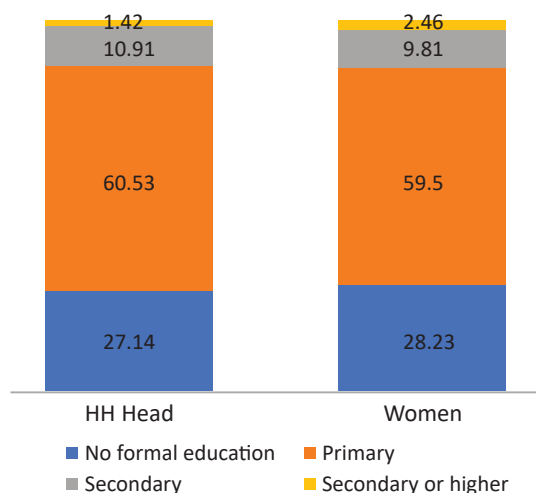
Majority of HHs (86 per cent) had access to an improved source of drinking water. Access varied greatly across districts, with Adjumani having almost all HHs with access to an improved source, while Zombo had only 70 per cent HHs having access to an improved source. The most common improved source is the tube well or borehole. More than 85 per cent of HHs in all districts needed 30 minutes or more to obtain drinking water.

Fewer than 2 in 10 households (18 per cent) in the 10 districts reported using improved toilet facilities. More than three quarters of households (81 per cent) used unimproved toilet facilities. The use of non-improved toilets is higher in rural areas (85 per cent of HHs) in comparison to urban areas (60 per cent of HHs). Koboko (93 per cent) had the highest proportion of households using non-improved toilet facilities.



EDUCATION

More than one-fourth of household heads and women did not have any formal education. On average, 60 per cent HH head and women had at least attended primary education. Only 1.3 per cent and 2.34 per cent HH heads and women had attended secondary or higher education respectively.



HOUSEHOLD DURABLE GOODS

More than half of the households (55 per cent) owned a mobile phone, 35.1 per cent owned a radio and only 2.5 per cent owned a television. Most of the households (89 per cent) had access to agricultural land while 64 per cent owned livestock.

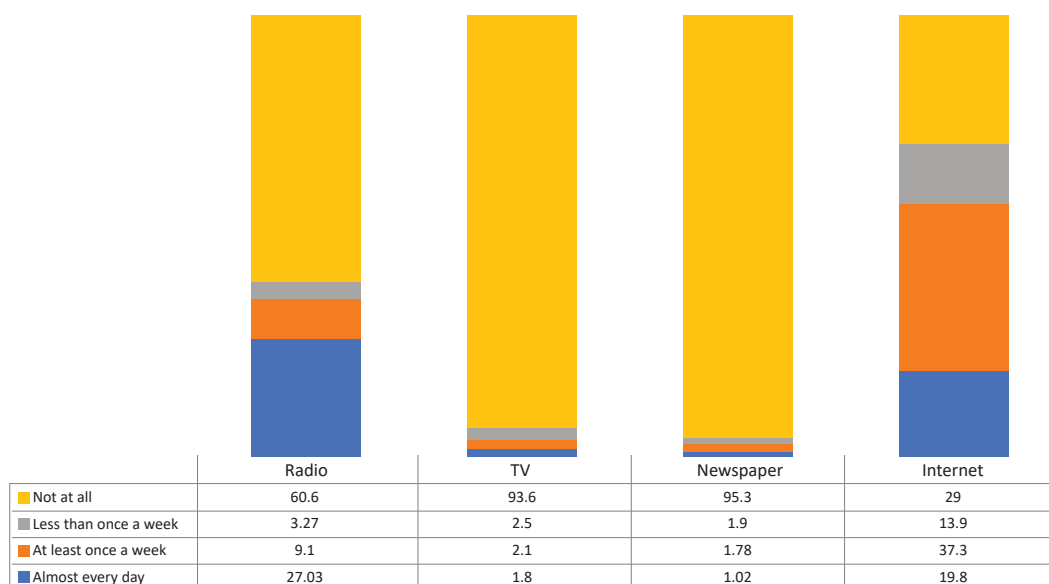
Urban households were more likely than rural households to own a mobile telephone, radio, or television. In contrast, rural households are more likely to own agricultural land or farm animals than urban households.

WOMEN'S EXPOSURE TO MASS MEDIA

Radio is the dominant medium of information for both women and men across the 10 districts in northern Uganda: 12.6 per cent of women listened to the radio at least once a week. Zombo (21 per cent) had the highest proportion of women listening to radio at least once a week.

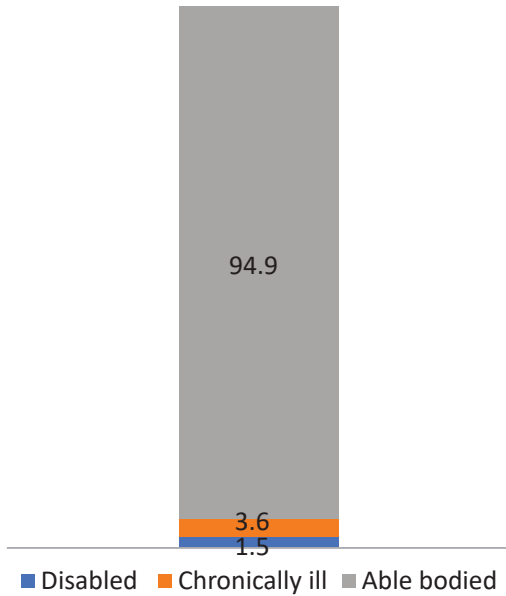
The Internet is also a critical tool through which

people access and share information. Internet use includes accessing web pages, email, and social media. Internet use is, however, very low. Only 2 per cent of the women have ever used the internet. It can be observed that the more educated women had a higher probability of having had access to any media.



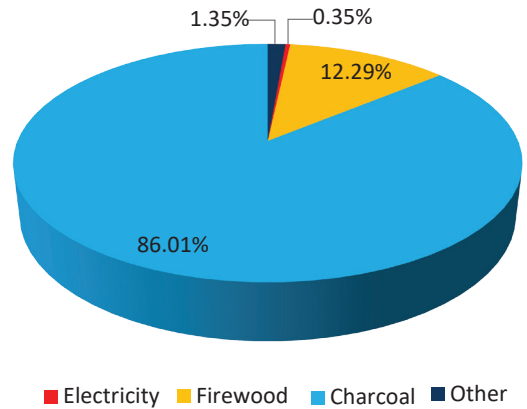
DISABILITY AND POLYGAMY

The majority of HHs did not have a disabled household head. Only 1.5 per cent households had a disabled head while 3.6 per cent had a chronically ill household head. Omoro district had the highest proportion of (5.5 per cent) disabled HH head.



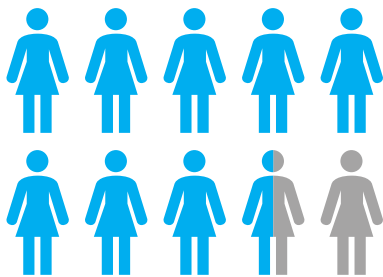
COOKING FUEL

Majority of households (86 per cent) used firewood as a fuel for cooking while 12 per cent households used charcoal. Only 1.3 per cent of HHs used a clean source of fuel for cooking.

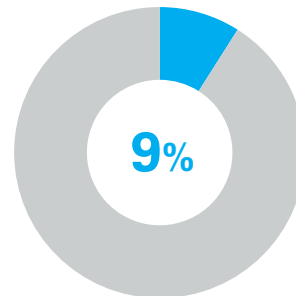


ALCOHOL CONSUMPTION BY WOMEN

Most women (more than 8 in 10) had never consumed any form of alcohol. Only 9 per cent of women reported having had at least one alcoholic drink at any time during the previous one month.



More than **8** in **10** women had never consumed any alcohol

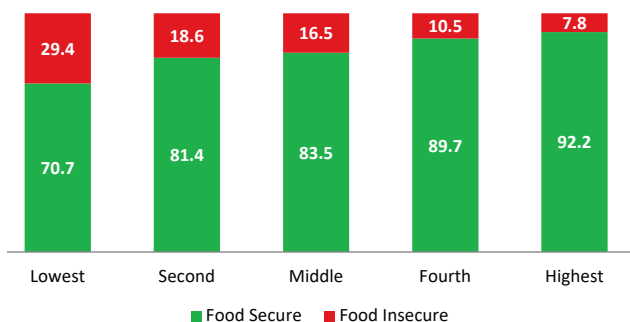
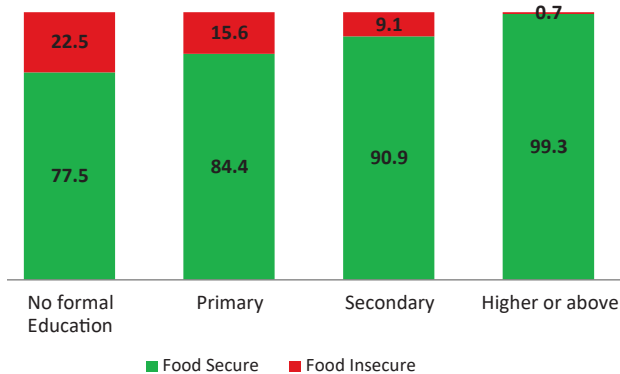


9 percent women had at least one alcoholic drink the previous month

FOOD SECURITY

HOUSEHOLD FOOD SECURITY SITUATION USING CONSOLIDATED APPROACH TO REPORTING INDICATORS (CARI)

HH food consumption varies considerably with the education status of the household head, wealth and residence. HHs with no formal education had 7 per cent poorer food consumption compared to households where they had at least attained primary education. Rural HHs (5.1 per cent) were more likely to have poor food consumption than urban HHs (1.6 per cent). HHs in the lowest wealth quintile (9 per cent) were more likely to have poor food consumption than HHs in the highest wealth quintile (2.1 per cent).



HOUSEHOLD FOOD SECURITY SITUATION USING FOOD CONSUMPTION SCORE

More than three quarters (78 per cent) households had “Acceptable”, 17 per cent HHs had “borderline” and 5 per cent had “poor” food consumption.

HHs in districts Otuke (14 per cent), Pader (9.8 per cent) and Omoro (6.3 per cent) were more likely to have “poor” food consumption than other districts. The HH food consumption varied notably by household head’s education status, wealth quintile and residence. HH with a head who had no formal education had 7 per cent “poor” food consumption compared to households with a head having higher levels of education. Rural HHs (5.1 per cent) are more likely to have poor food consumption than urban HHs (1.6 per cent). HHs in the lowest wealth quintile (9 per cent) were more likely to have poor food consumption than HHs in the highest wealth quintile (2.1 per cent).

HOUSEHOLD FOOD SECURITY SITUATION USING LIVELIHOOD COPING STRATEGIES

A high percentage of households (97 per cent) did not adopt any coping strategies. Only 1.3 per cent, 0.9 per cent and 0.8 per cent of HHs adopted emergency, crisis and stress coping strategies in 30 days prior to survey respectively.

HOUSEHOLD FOOD SECURITY SITUATION USING FOOD EXPENDITURE SHARE

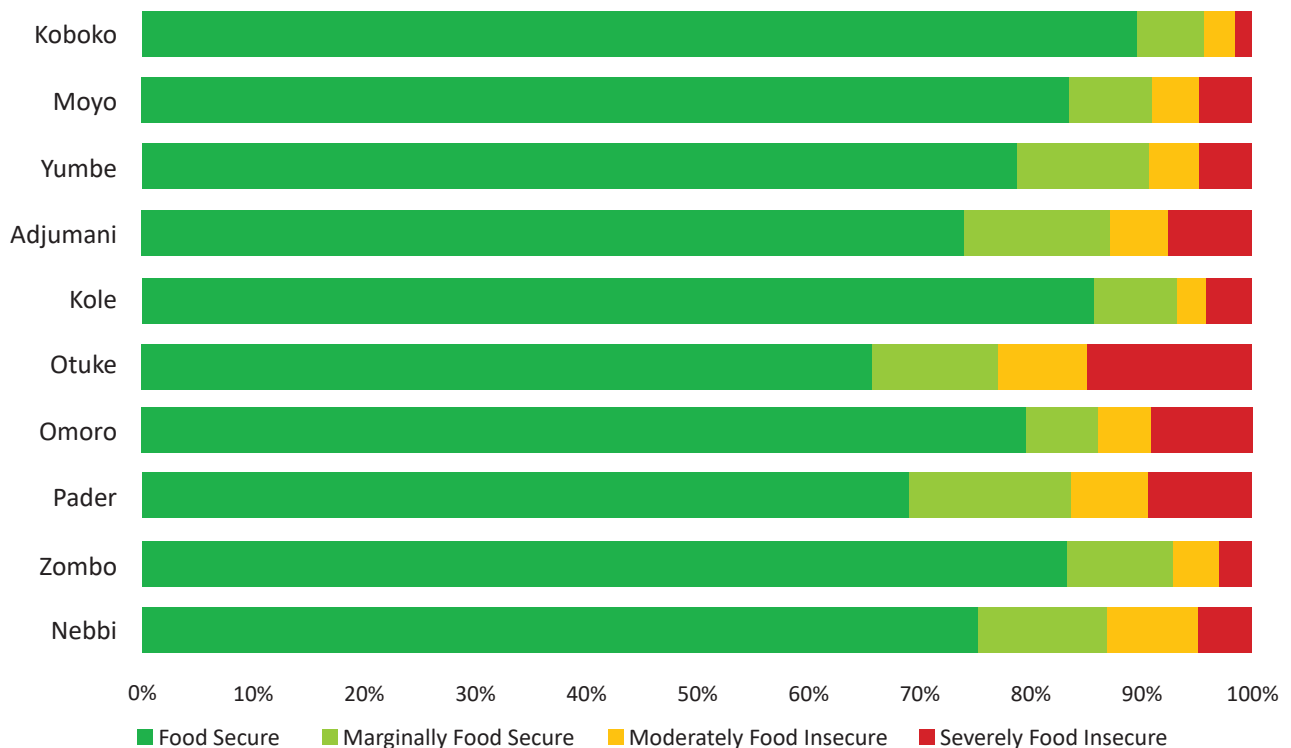
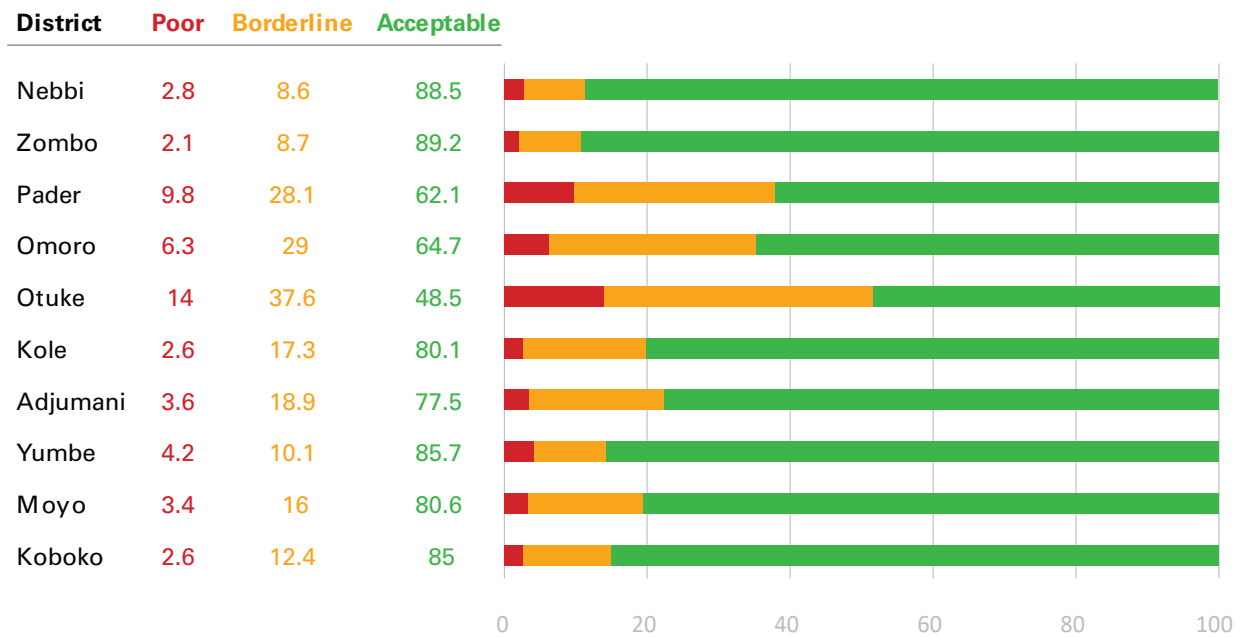
The majority of households (79 per cent) were food secure, followed by 10.2 per cent HHs which were marginally food secure while 4.9 per cent were moderately food insecure and 5.9 per cent were severely food insecure.

Otuke had the most households (14.2 per cent) with severe food insecurity followed by Pader (9.4 per cent), Omoro (9.2 per cent) and Adjumani (7.2 per cent). Koboko had the least households (1.4 per cent)

with severe food insecurity. Only 0.7 per cent of HHs with head having higher or above education had severe food insecurity compared to 8.1 per cent HH heads with no formal education. HH in the highest

wealth quintile (3.1%) are less likely to be severely food insecure than HHs in the lowest wealth quintile (10.9 per cent).

HH categorised as per Food Consumption Score*



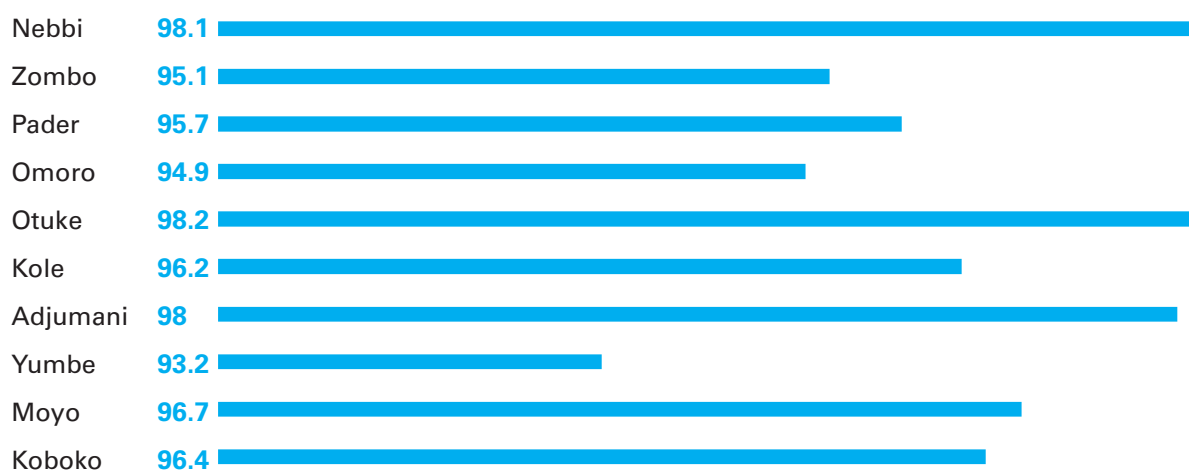
MATERNAL AND CHILD HEALTH

ANTENATAL CARE

Nearly two-thirds of women age 15-49 years (62.7 per cent) received antenatal care (ANC) from a skilled provider (doctor, nurse, midwife, or auxiliary nurse/

midwife), most commonly from a nurse/midwife (88.9 per cent). The ANC coverage varied from 44.6 per cent in Pader to 79.7 per cent in Moyo.

Use of skilled service provider

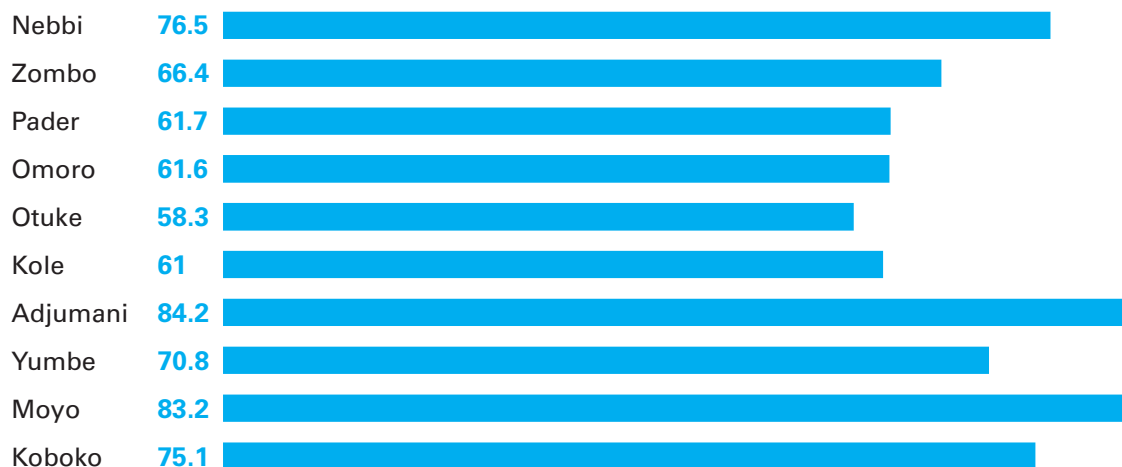


ANC 4 VISIT

The timing and number of ANC visits are also important. Eighteen per cent of women, as recommended, had their first ANC visit in the first

trimester. More than half of women (57 per cent) make four or more ANC visits.

Number of ANC visits and timing of first visit



COMPONENTS OF ANC CARE

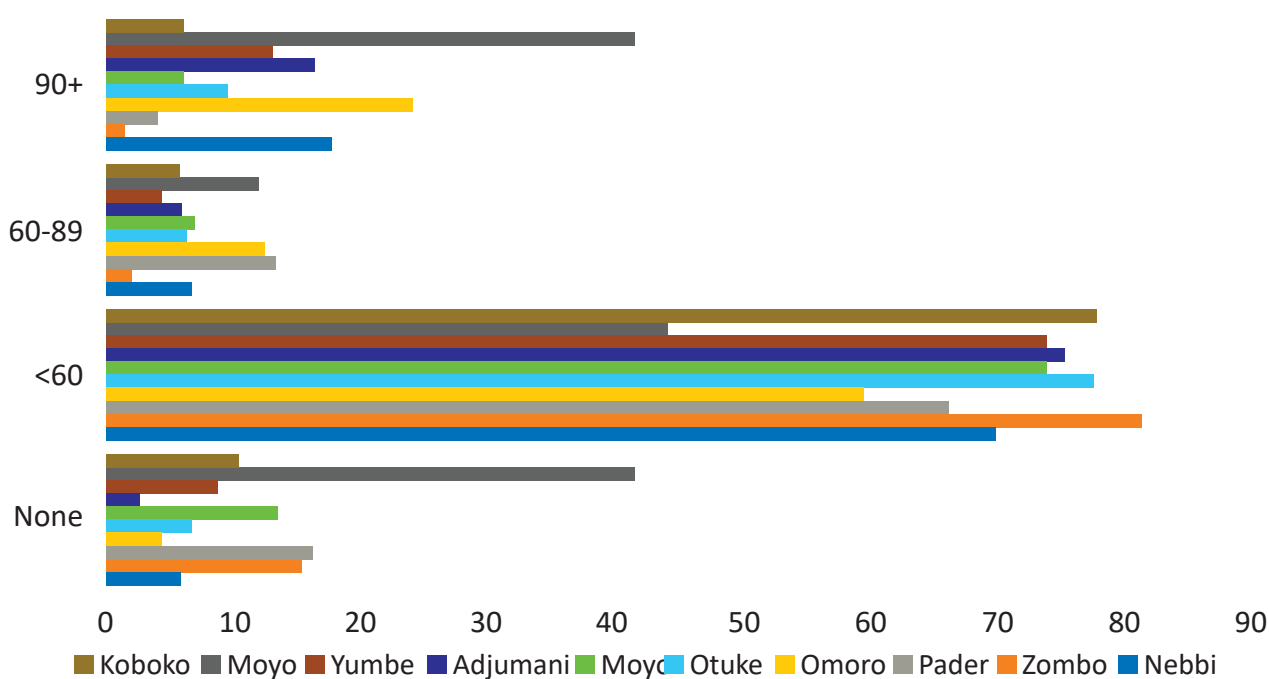
Among women who received ANC for their most recent birth, 98 per cent had their blood sample taken, 89 per cent had their blood pressure measured, and 63 per cent had a urine sample taken.

More than nine in 10 (92 per cent) women took iron tablets or syrup at least once, and more than 6 in 10 (65 per cent) took intestinal parasite medication at least once.

IFA INTAKE AND DEWORMING BY WOMEN

One in 10 women did not take iron and folic acid tablets, while two thirds of women took deworming medication during the pregnancy of their last birth.

Majority of women (72 per cent) took less than 60 IFA tablets. Almost 14 per cent of women took 90 or more IFA tablets.



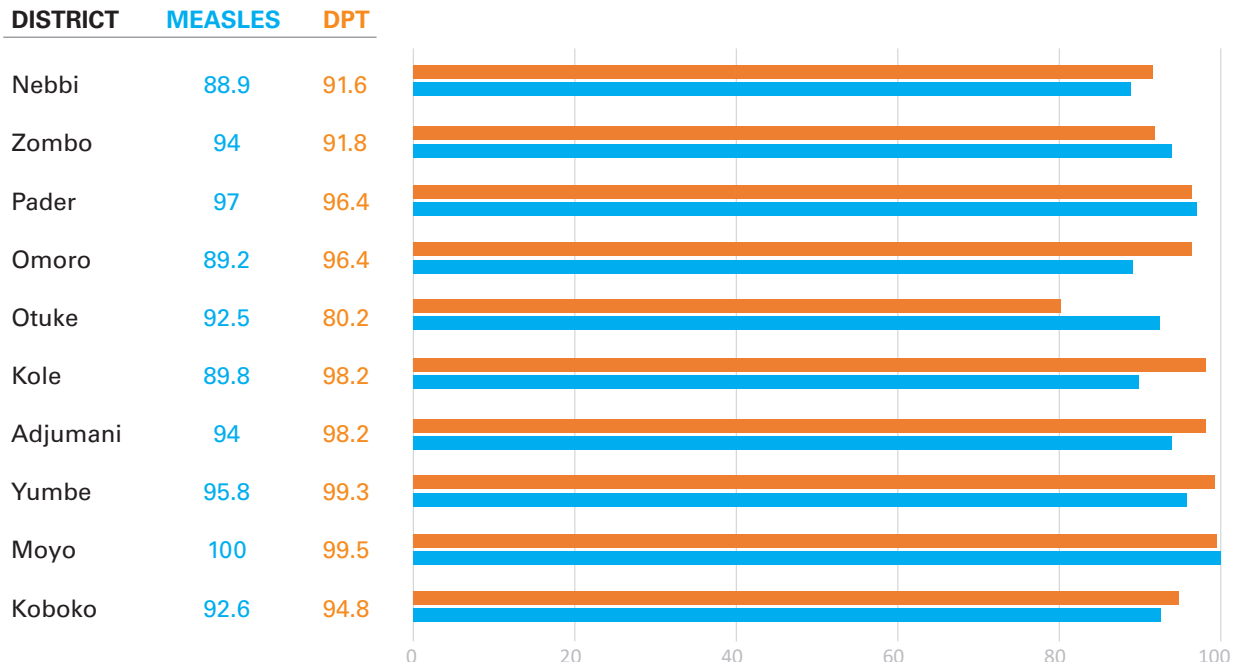
VACCINATION

More than 9 in 10 (92 per cent) children were immunised against measles; more than 9 in 10 (95 per cent) received the DPT vaccine.

Moyo district had the highest vaccination coverage for measles (100 per cent) and DPT3 (99.5 per cent) while Nebbi had the lowest vaccination coverage (89 per cent) for measles and Otuke had the lowest

coverage (80 per cent) for DPT3.

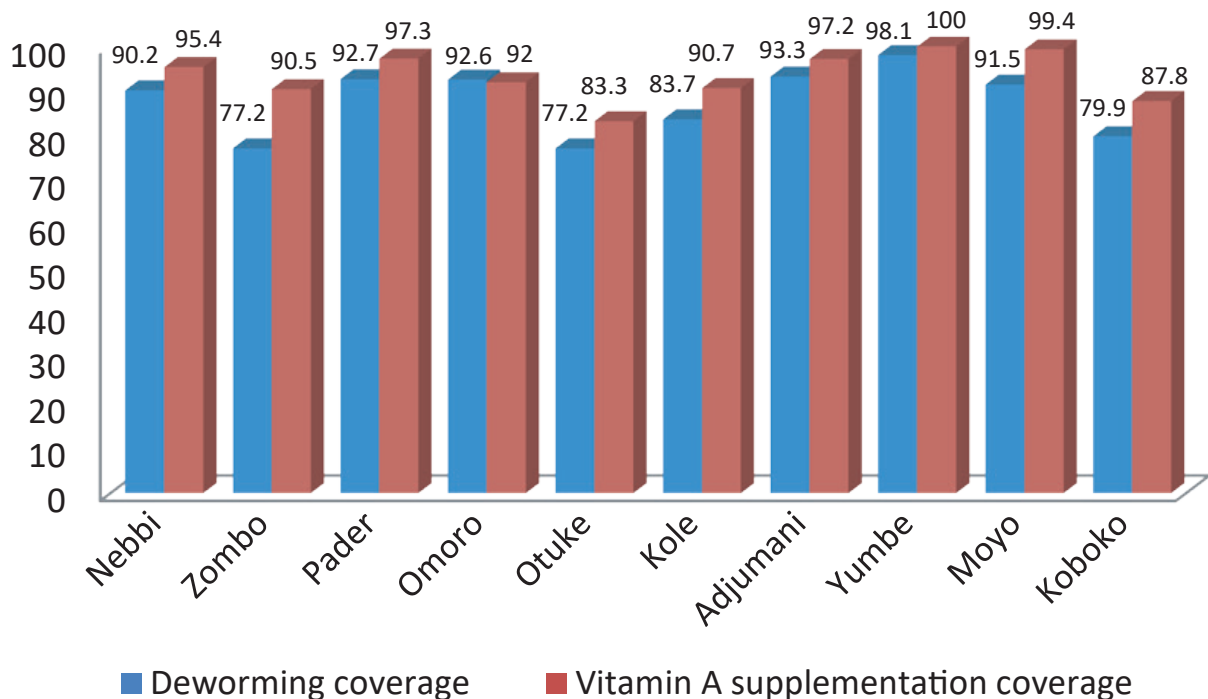
Women with higher or above education level are more likely to retain the immunisation card than women with no formal education. There was a slightly higher percentage of children in urban areas getting immunised for measles and DPT3 than the children in rural area.



DEWORMING AND VITAMIN A SUPPLEMENTATION

Almost all children (96 per cent) were dewormed, and more than 9 in 10 (94 per cent) received Vitamin A supplementation.

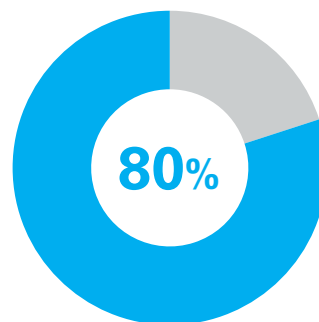
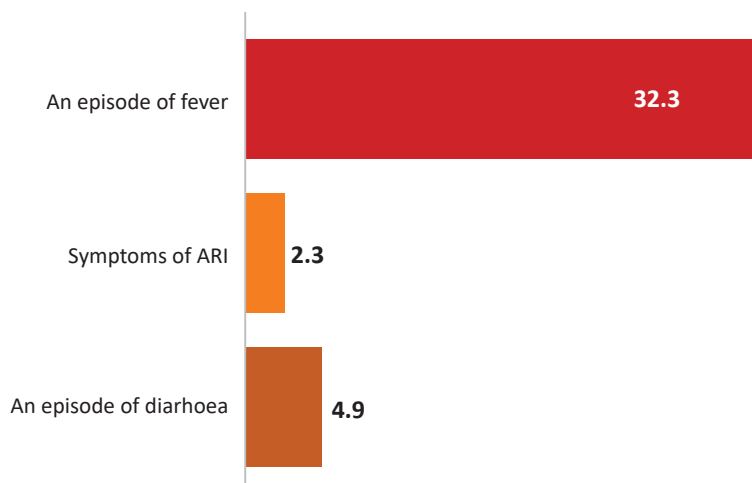
All districts had more than 80 per cent coverage for vitamin A supplementation in children. Yumbe district had the highest coverage (100 per cent) while Otuke (83 per cent) had the lowest.



CHILDHOOD ILLNESS

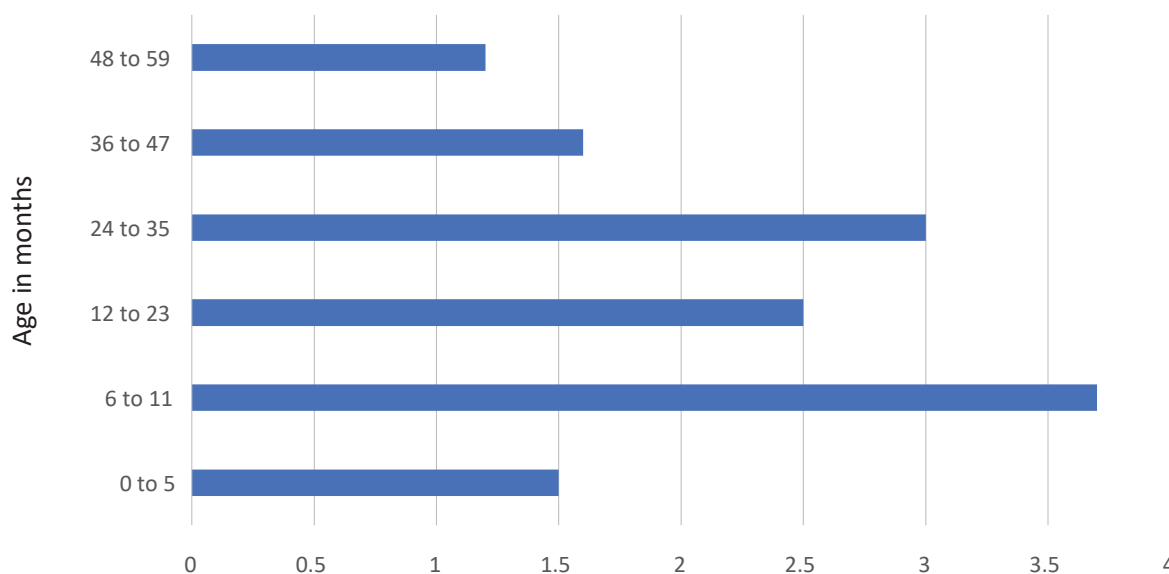
Among children under the age of five, 2.3 per cent had symptoms of acute respiratory infection (ARI), 4.9 per cent had diarrhoea and 32.3 per cent

reportedly had fever in the two weeks preceding the survey.

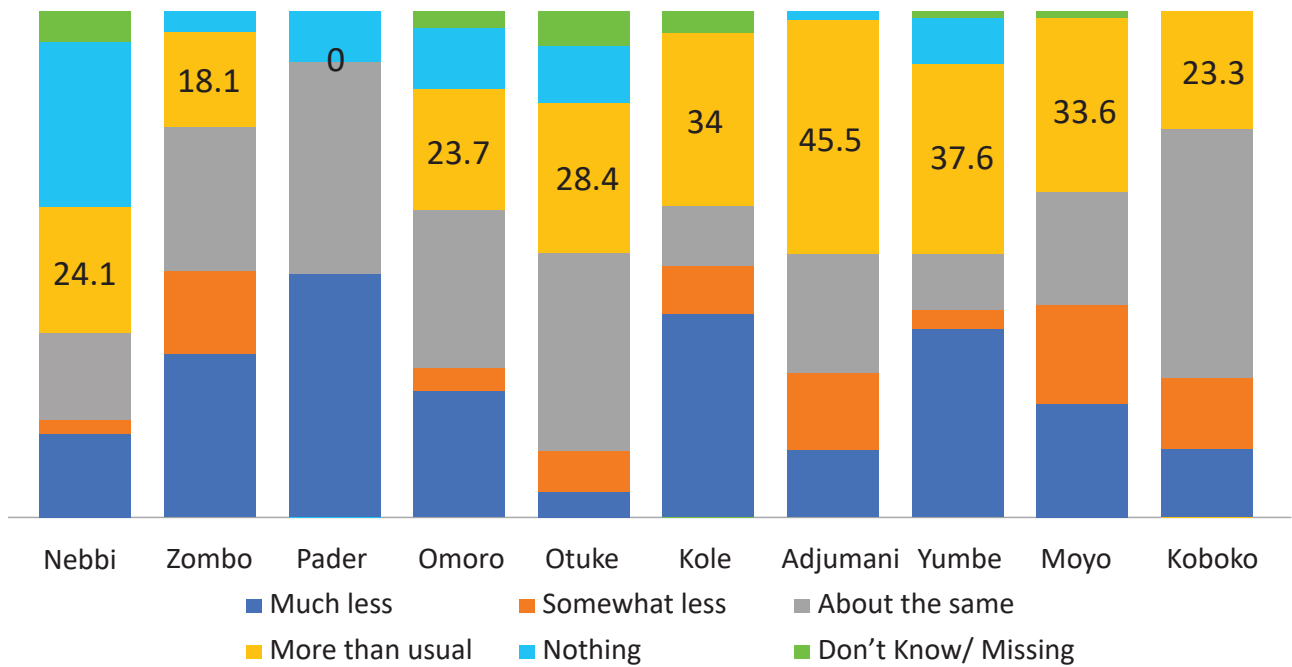
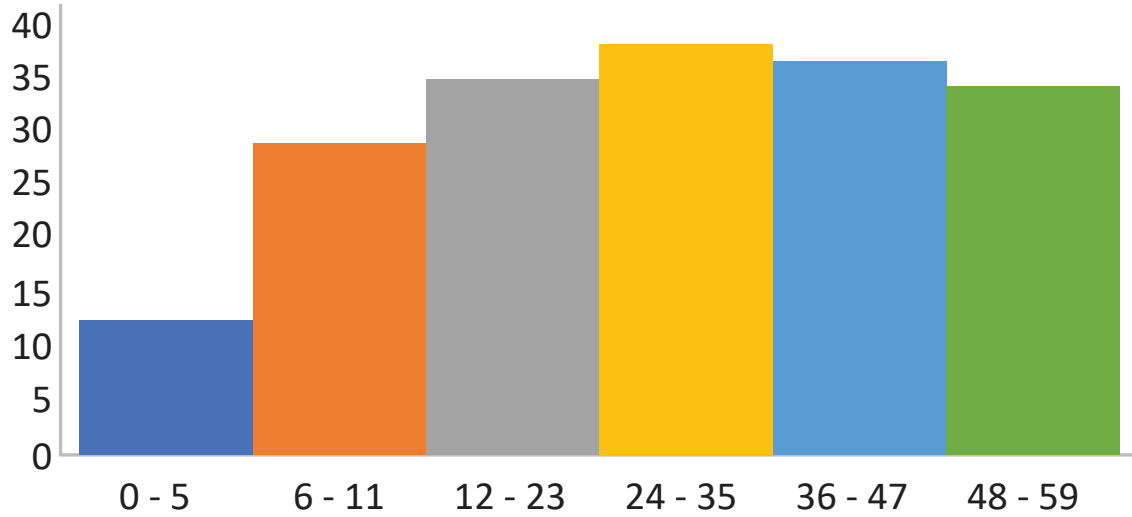


80 percent children under age 5 years with fever or diarrhoea for whom advice or treatment was sought

Symptoms of ARI



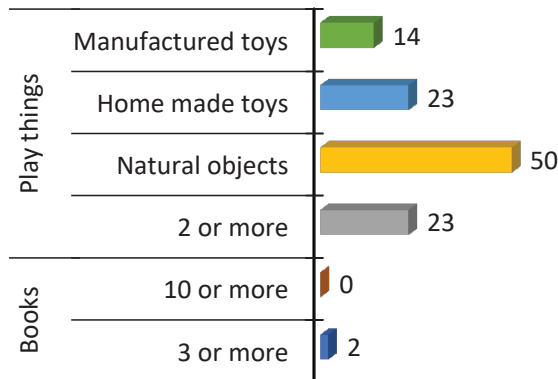
Fever



EARLY CHILDHOOD DEVELOPMENT

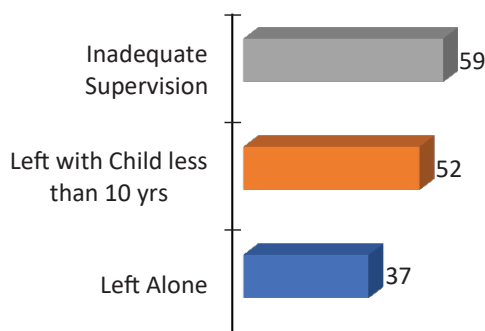
CHILDREN'S BOOKS AND PLAYTHINGS

Only 2 per cent of youngest children under age five had three or more children's books or picture books. None had 10 or more books. Less than one quarter (23 per cent) of children played with two or more kinds of playthings when they were at home. Half (50 per cent) of children played with household or natural objects, 23 per cent played with homemade toys, and 14 per cent played with manufactured toys.



INADEQUATE CARE FOR CHILDREN

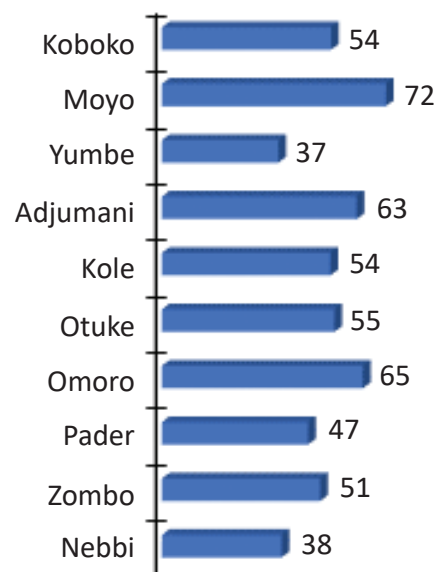
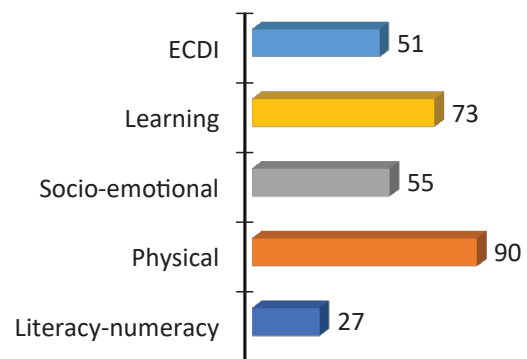
Nearly 6 in 10 (59 per cent) of the youngest children under age five received inadequate care for at least one hour in the week preceding the survey: 37 per cent spent at least one hour completely alone, and 52 per cent spent at least one hour in the care of another child younger than age 10.



EARLY CHILD DEVELOPMENT INDEX

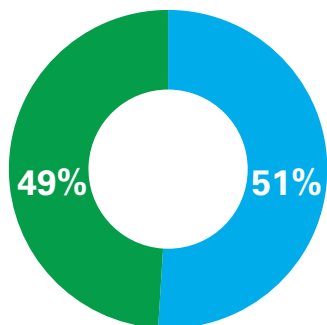
Slightly more than half (51 per cent) of the youngest children age 36-59 months are developmentally on track according to the early child development index (ECDI). Ninety per cent of children are on track in the physical development domain, 73 per cent in the learning domain, 55 per cent in the social-emotional domain, and only 27 per cent in the literacy-numeracy domain.

The proportion of children who are developmentally on track was highest in Moyo District (72 per cent) and lowest in Yumbe (37 per cent) and Nebbi (38 per cent) districts.

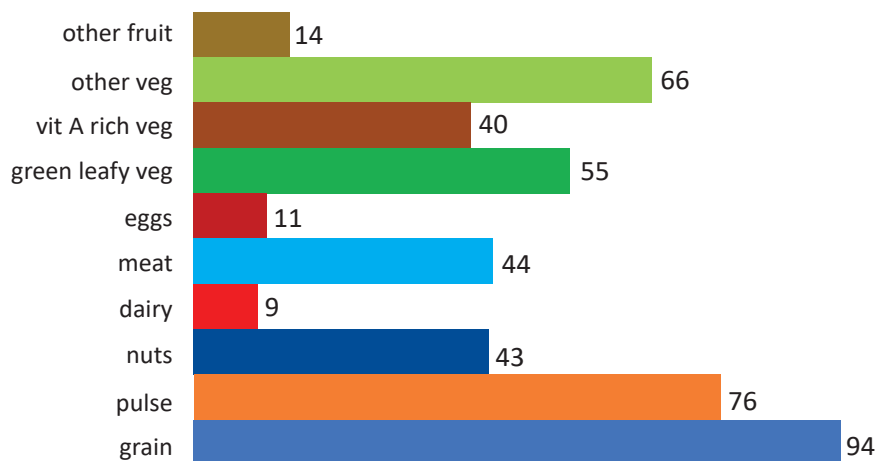


MATERNAL, INFANT AND YOUNG CHILD FEEDING

WOMEN DIETARY DIVERSITY



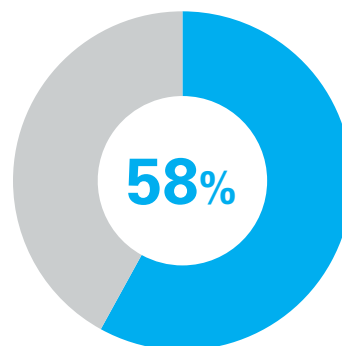
■ Ate \geq 5 food groups
 ■ Ate \leq 5 food groups



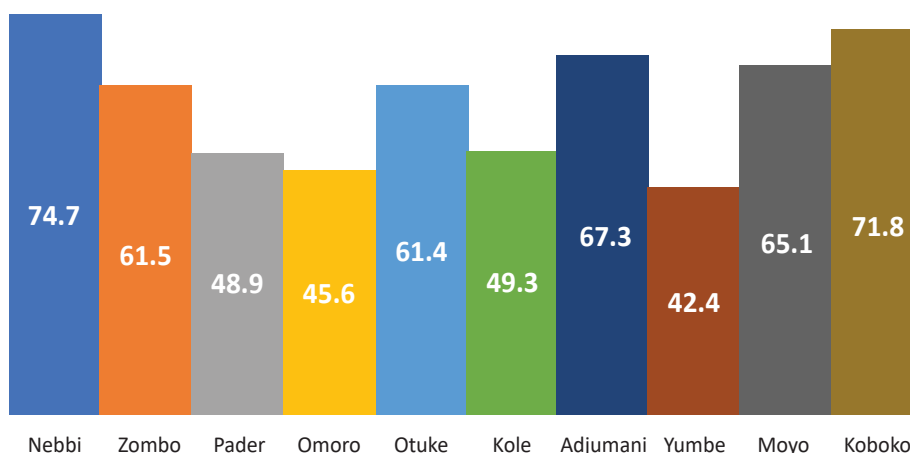
BREASTFEEDING

Almost all last-born children (98 per cent) born in the two years before the survey had ever been breastfed. However, a much lower proportion (58 per cent) were breastfed within one hour of birth.

The proportion of children who had been breastfed within one hour of birth varied greatly across districts with only 42 per cent in Yumbe and 75 per cent in Nebbi.

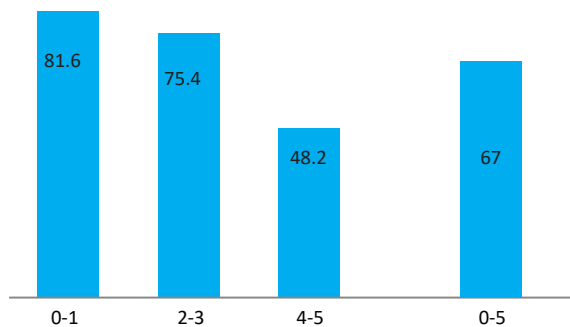


58 percent children were breastfed within one hour of birth



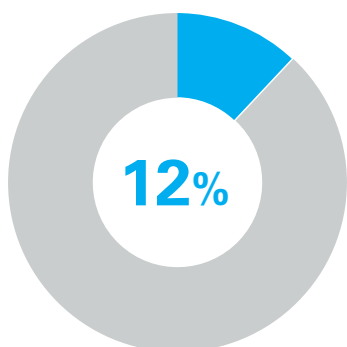
Indicator	Value
Exclusive breastfeeding under 6 months	67.3
Exclusive breastfeeding at 4-5 months of age	48.2
Continued breastfeeding at 1 year	88.3
Introduction of solid, semi-solid or soft foods (6-8 months)	79.6
Continued breastfeeding at 2 years	56.1
Age-appropriate breastfeeding (0-23 months)	69.7
Predominant breastfeeding (0-5months)	66.6
Bottle feeding (0-23 months)	14.0

Two thirds (67 per cent) of children under six months were exclusively breastfed. Exclusive breastfeeding declined with age, from 82 per cent among children aged zero to one month to 75 per cent among those aged two to three months and 48 percent among those aged four to five months.



The proportion of children who are not breastfeeding increases with age, from one per cent among those aged zero to one month to 34 per cent among those aged 18 to 23 months.

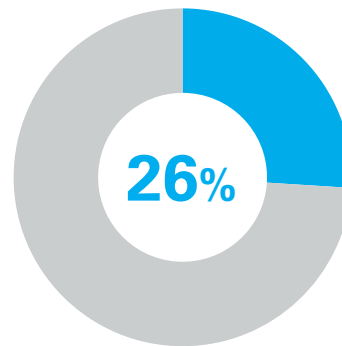
COMPLEMENTARY FEEDING



Only 12 percent children were fed as recommended minimum acceptable diet

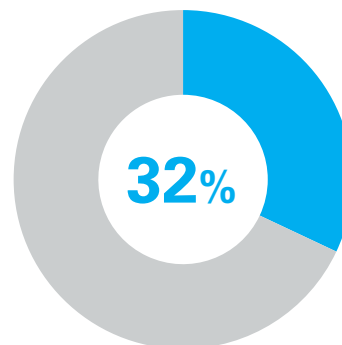
Only 12 per cent of last-born children aged six to 23 months were fed a recommended minimum acceptable diet in the 24 hours preceding the interview.

Fewer than three in 10 (26per cent) of children aged six to 23 months were fed according to recommended minimum dietary diversity (they were fed from at least four food groups).



Only 26 percent children were fed as recommended minimum dietary diversity

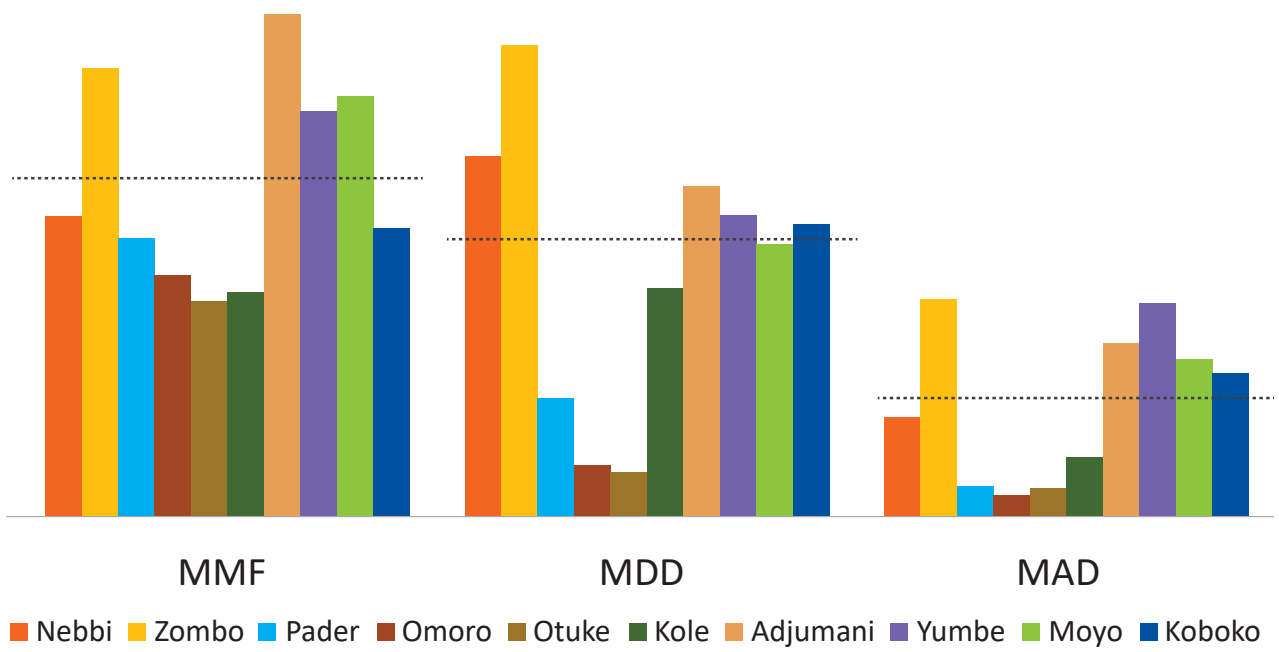
Almost one-third (32 per cent) of children aged six to 23 months were fed according to recommended minimum meal frequency. They were fed two to four times per day depending on age and breastfeeding status.



32% children were fed as recommended minimum meal frequency

Omoro (1.7 per cent), Otuke (3.4 per cent) and Pader (4.1 per cent) had the lowest rate of the Minimum Acceptable Diet (MAD) while Yumbe (23.7 per cent) and Zombo (23.5 per cent) had the highest proportion.

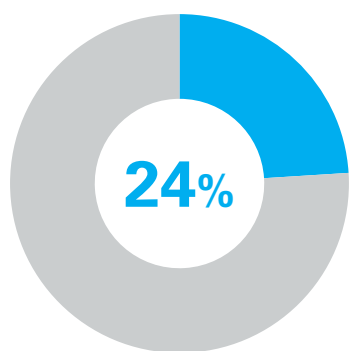
The proportion of children who are breastfeeding and consuming complementary foods first increases with age, peaking at 88 per cent among children aged nine to 11 months and then falls among children age 12-23 months as older children stop breastfeeding.



NUTRITIONAL STATUS OF WOMEN AND CHILDREN

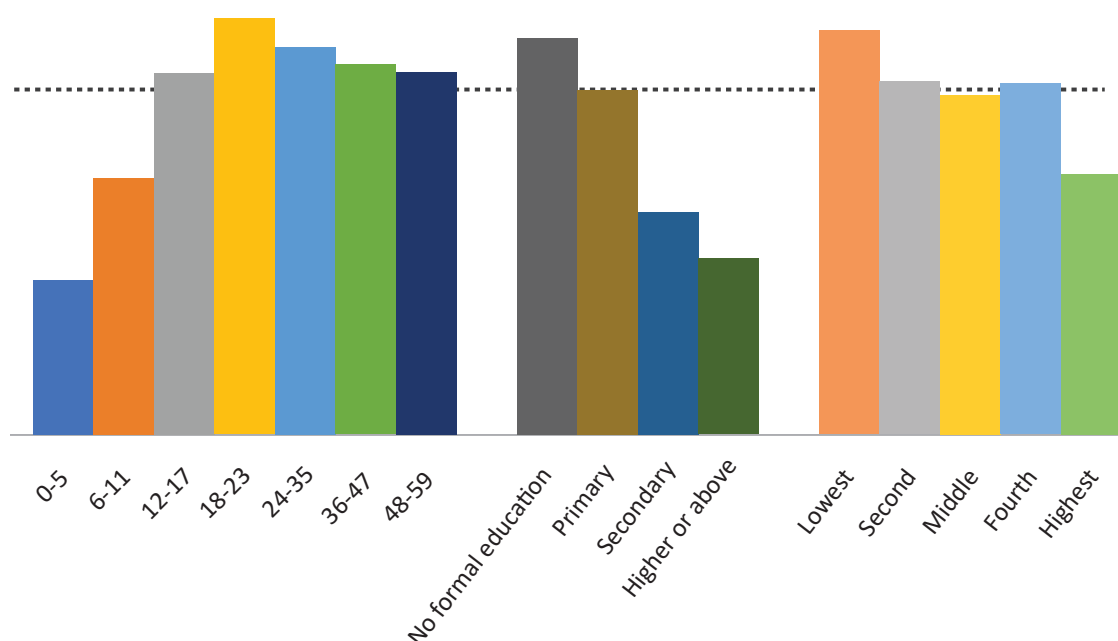
STUNTING

In 10 districts of Northern Uganda, almost 24 per cent of children under five years of age were short for their age i.e. stunted. As per WHO's new prevalence threshold for stunting, the region had a "high" burden of stunting.



24 percent children were stunted

The data shows a gradual increase in stunting rate with increasing age of children. The growth retardation starts before birth and it continues to increase to peak for children 18-23 months of age



and then starts to reduce.

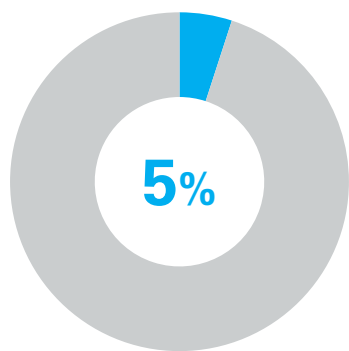
The stunting rate was highest (27.6 per cent) among women with no formal education and lowest (12.4 per cent) among women with higher or above education.

Women from the lowest wealth quintile had the highest rate of stunting (28.4 per cent) while the women from the highest wealth quintile had the lowest rate of stunting (18.4 per cent).

The stunting rate varied among districts, with Kole having the lowest prevalence of stunting (15.2 per cent) while Zombo had the highest prevalence of stunting (35 per cent).

Out of 10 districts, five districts, namely Omoro, Otuke, Kole, Adjumani and Moyo, had a stunting prevalence of 10-20 per cent i.e. they had "medium" burden of stunting. Nebbi, Pader, Yumbe and Koboko had a stunting prevalence between 20 and 30 per cent and these districts are categorised as "high" burden of stunting. One district Zombo had "very high" rate of stunting (35.7 per cent).

WASTING



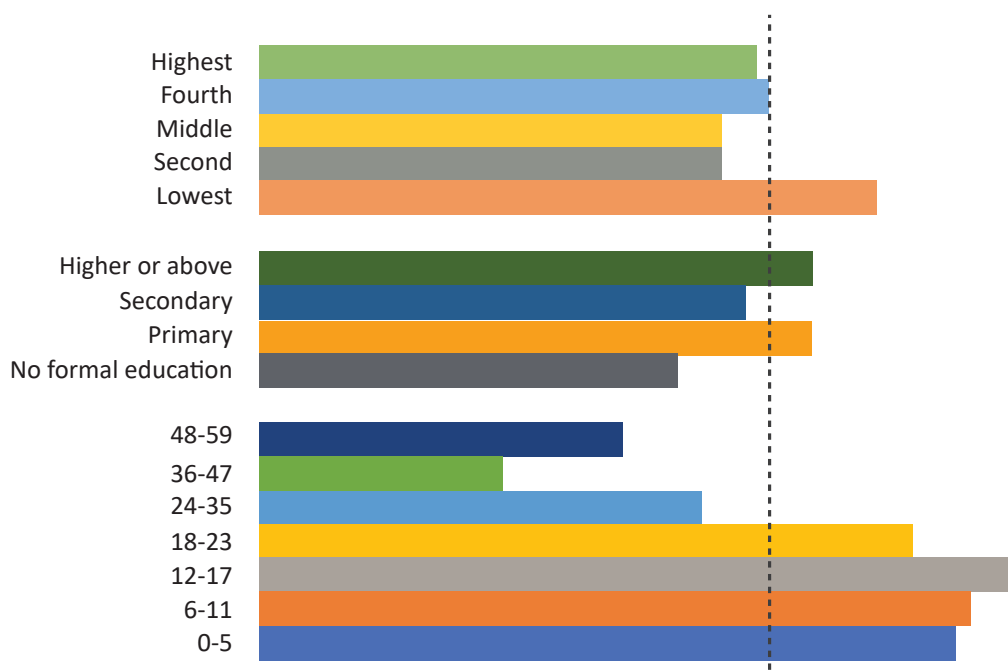
Almost 5 per cent of children under the age of five years were wasted. The revised prevalence threshold

by WHO considers less than five per cent wasting prevalence as “low”.

The wasting rate was higher among children under two years of age than those above two years of age. Households in the lowest wealth quintile had the highest rate of wasting.

The prevalence of wasting was highest in Otuke (6.1% per cent) followed by Moyo (4.4 per cent), Zombo (4.1 per cent) and Pader (4 per cent). Adjumani (1.4 per cent) had the lowest prevalence.

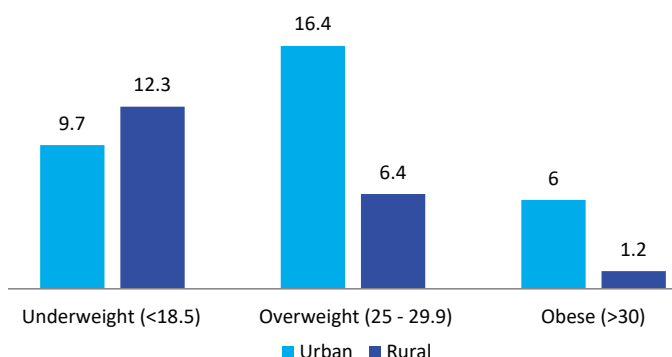
Based on Mid Upper Arm Circumference (MUAC) measurement, 2.8 per cent of children were acutely malnourished, while almost one per cent were severely acutely malnourished.



WOMEN NUTRITION

Almost seven in 10 women age 15-49 (68 per cent) had a normal BMI; nine per cent were thin, while 24 per cent were overweight or obese.

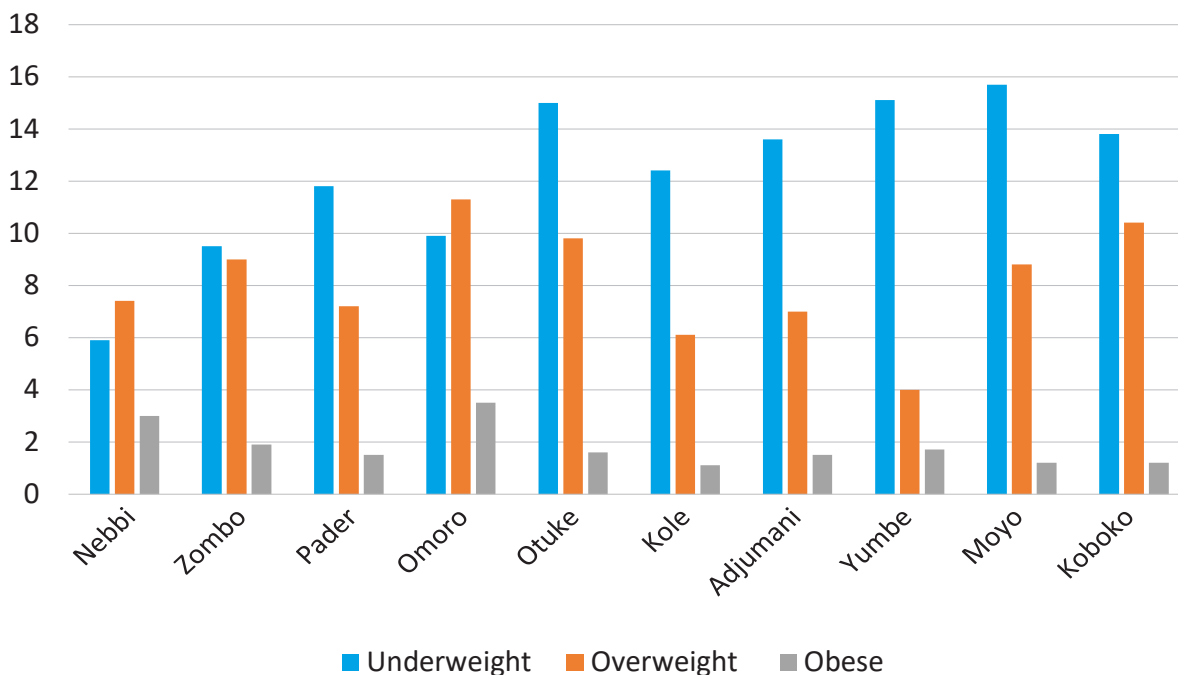
There was a notable variation in women’s nutritional status as indicated by BMI by residence. More women were undernourished (BMI<18.5) in rural areas than the urban. In contrast, a higher proportion of women in urban areas were overweight or obese than the women in rural areas.



In all districts, the co-existence of undernutrition and overnutrition in women were present.

Moyo (15.7 per cent), Yumbe (15.1 per cent) and Otuke (15 per cent) had a higher prevalence of undernutrition among women while Omoro (9.9 per cent), Zombo (9.5 per cent) and Nebbi (5.9 per cent) had lower rates of undernutrition.

A higher proportion of women from Omoro, Koboko, Otuke and Moyo were overweight than in other districts. Yumbe district had the lowest percentage (4 per cent) of overweight women. Omoro and Nebbi had the highest proportion with 3.5 per cent and 3 per cent women with obesity.



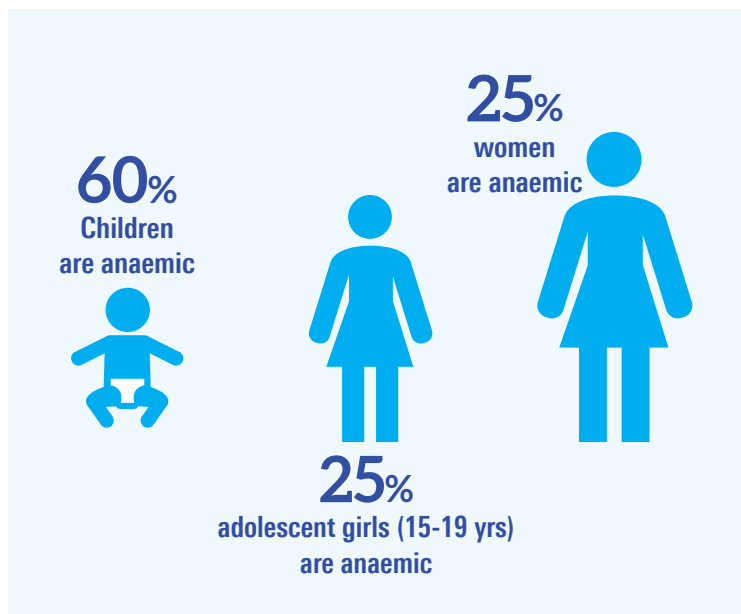
ANAEMIA IN WOMEN AND CHILDREN

Six in every 10 children in the 10 selected districts in Northern Uganda were anaemic (haemoglobin below 11 g/dl), the prevalence being highest in Yumbe district, with seven out every 10 children suffering from anaemia.

With the exception of Otuke that had moderate (20-39.9 per cent) prevalence of anaemia, all the other districts had severe ($\geq 40\%$) anaemia prevalence among children under five years.

More children were anaemic in rural areas than in urban areas

One-quarter (25 per cent) of women age 15-49 had some degree of anaemia. Almost two in 10 (19 per cent) were



mildly anaemic, 6 per cent moderately anaemic, and almost none was severely anaemic.

Among the districts, Yumbe (35 per cent) and Pader (35 per cent) had the highest proportion of women with some degree of anaemia. Otuke (13%) and Nebbi (13%) had the lowest proportion of women aged 15-49 with some degree of anaemia.

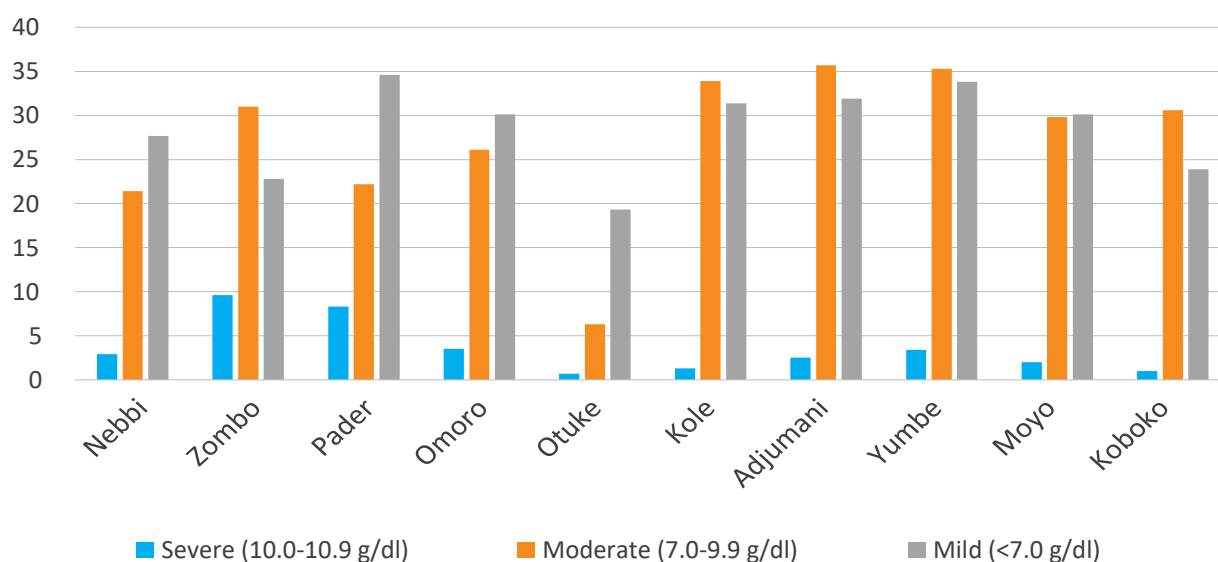
None of the districts had more than 40 per cent of the women with anaemia. Zombo, Pader, Omoro, Kole, Adjumani, Yumbe, Moyo and Koboko Districts had

moderate (20–39.9 per cent) prevalence of anaemia, while Nebbi and Otuke Districts had mild (5–19.9 per cent) anaemia prevalence.

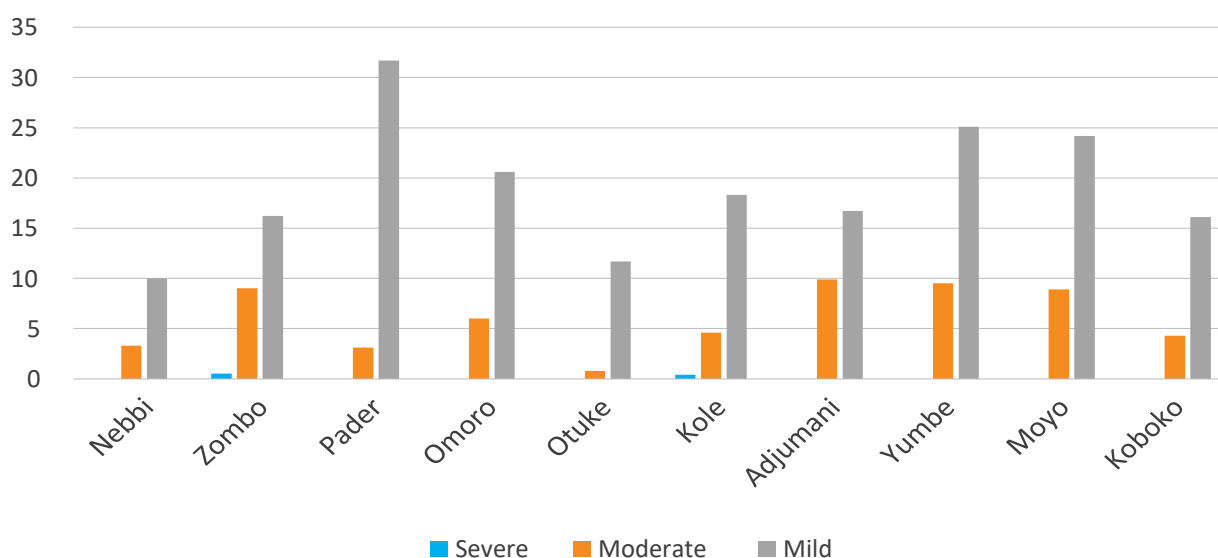
The most affected age group was women between the ages of 40 and 49 years. The prevalence of anaemia among women reduces with level of education.

25 per cent of adolescent girls (15-49 years) were anaemic.

Anaemia in Children



Anaemia in women



The technical and financial support for the FSNA was provided by European Union-Development Initiative for Northern Uganda.



EUROPEAN UNION

**DEVELOPMENT INITIATIVE
FOR NORTHERN UGANDA (DINU)**

