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THE REPUBLIC OF UGANDA

MULTIDIMENSIONAL CHILD POVERTY IN UGANDA

Volume 1: The Extent and Nature of Multidimensional Child Poverty and Deprivation - 2024

BRISTOL POVERTY INSTITUTE

CARDIFF UNIVERSITY PRIFYSGOL CAERDYDD

EPRC ECONOMIC POLICY RESEARCH CENTRE

Programa Universitario de Estudios del Desarrollo UNAM

Sweden Sverige

unicef for every child

MULTIDIMENSIONAL CHILD POVERTY IN UGANDA
VOLUME 1: THE EXTENT AND NATURE OF MULTIDIMENSIONAL CHILD POVERTY AND DEPRIVATION | 2024

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FOREWORD

23%
CHILDREN
were monetary 'poor' in 2016/17 and 2019/20

URBAN AREAS	*RURAL AREAS*
14%	**26%**

There was a
12%
DECLINE
in multidimensional poverty between 2016/17 and 2019/20

URBAN AREAS	*RURAL AREAS*
27%	**50%**

The purpose of this report is to describe the extent and nature of both monetary and multidimensional child poverty in Uganda based on the 2019/20 Uganda National Household Survey (UNHS). It looks at children living in households surviving on very low incomes, as well as those suffering multiple deprivations, in order to provide a comprehensive picture of the way poor children are living in Uganda today. Rights-based analytical approaches consistent with Uganda poverty descriptions were used in this report previously pioneered in the multi-dimensional child poverty, report based on 2016/17 UNHS. This consensual approach, used to measure multi-dimensional child poverty has been used by over 50 countries and the methodology is well documented in this report.

The report finds that although between 2016/17 and 2019/20 the monetary poverty rate for adults fell slightly, there was no improvement for children as 23% were monetary 'poor' in 2019/20 similar to the situation in 2016/2017. The multi-dimensional child poverty results present a contrasting picture to the monetary poverty results, with multidimensional child poverty declining from 56% in 2016/17 to 44% in 2019/20. Monetary and multidimensional child poverty is higher in rural areas compared to urban areas. Specifically, monetary child poverty is 14% in urban areas compared to 26% in rural areas in 2019/20. Similarly, multidimensional child poverty stood at 27% in urban areas compared to 50% in rural areas.

The Uganda Bureau of Statistics (UBOS) would like to acknowledge the efforts of its key partners in the production of this report. The Bristol Poverty Institute has been a key partner in pioneering this consensual approach and UBOS has benefitted greatly from the experience that has been drawn from multiple countries that have adopted this approach. UNICEF Uganda has also been key in not only strengthening relationships with multiple institutions that have been key in the measurement of monetary and multi-dimensional child poverty but also being able to facilitate the building of technical capacity in UBOS to measure child poverty.

I therefore urge all government institutions and other stakeholders to make informed decisions based on the findings in this report to better the situation of the Ugandan child.

Chris N.Mukiza (PhD)
Executive Director/Chief Statistician

ACKNOWLEDGEMENTS

We acknowledge the technical support from Bristol Poverty Institute of the University of Bristol, University of Cardiff and National Autonomous University of Mexico (UNAM). We would particularly like to thank the research team led by Professor David Gordon of University of Bristol, namely Tigist Grieve, Hector Najera, Shailen Nandy, Marco Pomati, Acomo Oloya, Mary Zhang and Helen Anderson.

We appreciate the financial and logistical support provided by UNICEF Uganda that made this study possible and as well as constructive advice and comments on all aspects of the project and their patience during the global COVID-19 pandemic, especially Moses Muse Sichei, Sarah Kabaija and Arthur Muteesasira. We also wish to thank colleagues from UNICEF Eastern and Southern Africa Regional Office, Matthew Cummins, Bob Muchabaiwa and Tayllor Renee Spadafora for reviewing the draft of this report and providing constructive technical feedback. We appreciate the Economic and Policy Research Centre (EPRC) for peer reviewing the report.

We would also like to thank the staff at the Uganda Bureau of Statistics for their leadership and working with the external technical team led by Professor Gordon, especially James Muwonge, Hellen Nviiri and Vincent Ssennono.

Above all, we are very grateful to all enumerators, field researchers and participants who volunteered their time to take part in the UNHS 2019/20 but cannot be acknowledged individually due to space limitations.

EXECUTIVE SUMMARY


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The overarching objective of this report is to provide an exposition of the extent and nature of multidimensional child poverty in Uganda and relate it to child rights as enshrined in the United Nations Convention on Child Rights (UNCRC). It looks at children living in households surviving on very low incomes, as well as those suffering multiple deprivations (i.e., an enforced lack, due to not being able to afford important "socially perceived necessities" for children) in order to provide a comprehensive picture of the way poor children are living in Uganda today.

The study adopts a Consensual Deprivation Approach (sometimes called the Socially Perceived Necessities -SPN approach) to poverty measurement which argues that what constitutes a minimum acceptable way of life should be established by reference to the views of members of that society. The consensual approach used to measure multi-dimensional child poverty has been used by over 50 countries and the methodology is well documented in this report. In Uganda this was first used in measuring multi-dimensional child poverty based on Uganda National Household Survey (UNHS) 2016/17. This report, based on the 2019/20 UNHS, shows the progress that has been made in reducing the multidimensional poverty of children in Uganda during this period. In order to achieve this, a consensual poverty module was nested in the 2019/20 UNHS.

The report finds that while the overall multi-dimensional child poverty declined from 56% in 2016/17 to 44% in 2019/20, monetary child poverty remained constant at 23% over the same period. The fact that monetary poverty fell slightly for the adults while §monetary child poverty remained the same is worrying. There were fewer differences by gender or age group but both monetary and multidimensional poverty were high for households where there were three or more children. Similarly, children living with mothers only had higher multidi-

mensional child poverty (51%) compared to other living arrangements. Children identified as orphans (one or both parents deceased) had higher monetary poverty (26% compared to 22%) and multidimensional poverty (54% compared to 43%). This highlights the need to ensure additional support and social protection for households with a larger number of children and orphans.

The report finds that child poverty (monetary and multidimensional) varies significantly by geography. For instance for monetary poverty, the rate for children in urban areas is almost half (14%) of the national rate of monetary poverty (23%) compared with their rural counterparts where the rates are higher (26%). Similarly, multidimensional child poverty in urban areas was 27% compared to 50% in rural areas. Kampala has the lowest rate of both monetary and multidimensional child poverty (2%). In seven sub-regions, both monetary child poverty rates are above the national average of 23%. That is Acholi (72%), Karamoja (68%), Bukedi (37%), Busoga (33%), Kigezi (30%), Lango(26%) and Teso (24%). The same seven sub-regions with above-average monetary child poverty also have multidimensional child poverty above the national average of 44%. Further, areas in Northern and North-Eastern regions of Uganda severely affected by the prolonged exposure to conflict have higher monetary (58%) and multidimensional (71%) child poverty compared to areas that suffered few effects of conflict (monetary child poverty of 18% and multidimensional poverty of 38%). This highlights the fact that peace and security are prerequisites for eradicating child poverty, as violent conflict and war have long-lasting harmful effects on children.

The UNHS is a robust and comprehensive survey. However, its sample size of about 15,000 households means that it cannot be used to reliably measure child poverty for areas smaller than the 15 sub-regions of Uganda without significant sampling errors. However, for the design of effective anti-poverty child policies, the country needs child poverty estimates for small areas (below the sub-region) to enable resources to be targeted at the areas with the greatest need. The report addresses this challenge by combining UNHS with Population and Housing Census of 2014 information using Small Area Estimation (SAE) methodology. Through this process, multidimensional child poverty at district, county and sub-county levels are estimated and presented to facilitate policy making and programming. The SAE methodology results confirm that the highest rates of multidimensional child poverty are largely concentrated in North and Northern Uganda, and in general, the lowest rates are in Kampala. It further shows pockets of high multidimensional child poverty in sub-regions with lower sub-regional multidimensional child poverty, such as Toro, Buganda, North and Ankole. Similarly, while, on average, Kampala has the lowest poverty rates in Uganda, the non-central Parishes in Kampal have much higher poverty rates.

Furthermore, the 2019/2020 UNHS provide a unique opportunity to measure the initial effects of the COVID-19 pandemic on the lives of children and their families in Uganda. This is because the interview process was done in two phases, namely before the COVID-19 pandemic (September 2019 and February 2020) and during the first year of the pandemic (July to November 2020). The results show that during the COVID-19 pandemic multidimensional child poverty increased by 5% while monetary child poverty increased by 7% in 2020.

The report presents policy recommendations, including a need for a comprehensive child poverty eradication plan focusing on various rights of children enshrined in the UNCRC. It further notes that Uganda needs to increase its national budget on social protection, which could address adult and child poverty.

Multi-dimensional child poverty declined

56%

2016/2017

44%

2019/2020

Monetary poverty, the rate for children in urban areas is **almost half of the national rate**

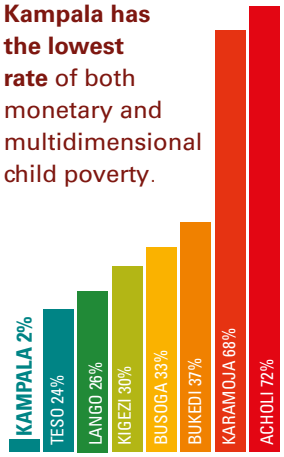
URBAN AREAS

14%

RURAL AREAS

26%

Kampala has the lowest rate of both monetary and multidimensional child poverty.



In seven sub-regions, both monetary child poverty rates are **above the national average of 23%**

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ACRONYMS AND ABBREVIATIONS

ACPF	Africa Child Policy Forum
ANOVA	Analysis of Variance
ACRWC	African Charter on the Rights and Welfare of the Child
BNPL	Basic Needs Poverty Line
CONEVAL	The National Council for the Evaluation of Social Development Policy in Mexico
ECLAC	Economic Commision for Latin America and Caribbean
ECOSOC	United Nations Economic and Social Council
FIES	Food Insecurity Experience Scale
FPL	Food Poverty Line
GDP	Gross Domestic Product
GLM	Generalised Linear Model
ILO	International Labour Organization
IRT	Item Response Theory
MD	Multidimensional
MDG	Millennium Development Goals
MDCP	Multidimensional Child Poverty
MFPED	Ministry of Finance, Planning and Economic Development
NDPI	National Development Plan I (2010/11 - 2014/15)
NDPII	National Development Plan II (2015/16 -2019/20)
NDPIII	National Development Plan III (2020/21 -2024/25)
NFPL	Non-Food Poverty Line
NPA	National Planning Authority
OPM	Office of the Prime Minister
PEAP	Poverty Eradication Action Plan
PRDP	Peace and Recovery Development Plan
PWD	People Living with Disability
SAE	Small Area Estimation
SDGs	Sustainable Development Goals
SPNs	Socially Perceived Necessities
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN-HABITAT	United Nations Human Settlements Programme
UNHS	Uganda National Household Survey
UNICEF	United Nations Children Fund
UPE	Universal Primary Education
USE	Universal Secondary Education
WASH	Water Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization

CHAPTER 1

INTRODUCTION

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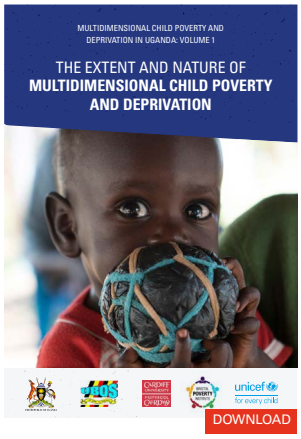
This report aims to show the extent and nature of child poverty in Uganda, using the latest and most reliable data available. The report looks at children living in households surviving on very low incomes, as well as those suffering multidimensional poverty, in order to provide a comprehensive picture of the way poor children are living in Uganda today.

The main part of this report is based on analyses of the 2019/2020 Uganda National Household Survey (UNHS). A representative sample of the population was interviewed in two phases:

- between September 2019 and February 2020 – before the COVID-19 pandemic; and
- between July and November 2020 – during the first year of the pandemic.

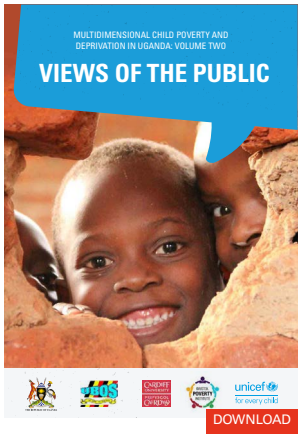
The UNHS 2019/2020 data thus also provide a unique opportunity to measure the initial effects of the COVID-19 pandemic on the lives of children and their families in Uganda.

This report draws upon and updates previous analyses of child poverty in Uganda published by the Government of Uganda during 2019, namely:



Multidimensional Child Poverty and Deprivation in Uganda: Volume One, The Extent and Nature of Multidimensional Child Poverty. Kampala, Government of Uganda & UNICEF.

Multidimensional Child Poverty and Deprivation in Uganda: Volume One, The Extent and Nature of Multidimensional Child Poverty: Appendices. Kampala, Government of Uganda & UNICEF. https://www.poverty.ac.uk/world/uganda



Multidimensional Child Poverty and Deprivation in Uganda: Volume Two, The Views of the Public. Kampala, Government of Uganda & UNICEF. https://www.poverty.ac.uk/world/uganda

Multidimensional Child Poverty and Deprivation in Uganda: Volume Two, The Views of the Public: Appendices. Kampala, Government of Uganda & UNICEF. https://www.poverty.ac.uk/world/uganda

Volumes One and Two of these published reports provide details of the findings of the quantitative (UNHS 2016/17) and qualitative (Focus Group) analyses, and the two volumes of Appendices provide extensive technical details about the research methods. A short summary of the results from these reports was published in 2020 as *Going Beyond Monetary Poverty Uganda's Multidimensional Poverty Profile*[1].

A fifth report on estimating and mapping child and adult poverty at small area level from the *Integration of Child Poverty Analysis in National Statistics project* is also available from UNICEF Uganda.

The Geography of Multidimensional Poverty in Uganda. Unpublished report, UNICEF Uganda

1.1 ANTI-POVERTY POLICIES AND TARGETS IN UGANDA

In 1997, the Uganda Government adopted the first *Poverty Eradication Action Plan* (PEAP). This had four main aims:

- Creating a framework for economic growth and transformation
- Ensuring good governance and security
- Directly increasing the ability of the poor to raise their incomes
- Directly increasing the quality of the life of the poor

In 2000, the PEAP was revised and the Government of Uganda adopted the goal of eradicating absolute poverty and set itself the ambitious target of reducing the percent of people who are in expenditure poverty to 10% of

1 https://www.unicef.org/esa/media/6146/file/UNICEF_Uganda-Multi-dimensional_child_poverty-2020.pdf

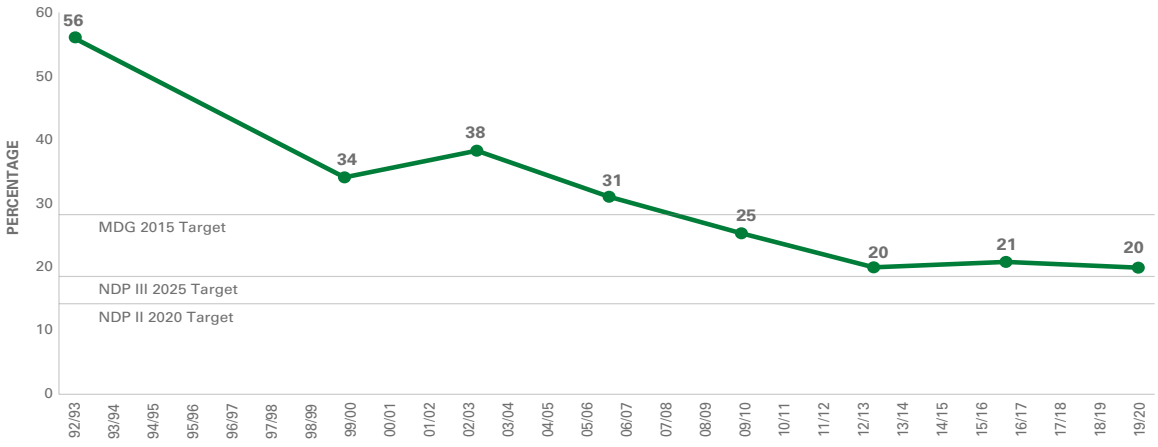
the population by 2017 (MFPED, 2000a. Millennium Development Goal (MDG) target aim at reducing extreme poverty by half between 1990 and 2015 – from over 50% to about 28%. In 2010, the first Uganda National Development Plan (NDPI) was launched. This report included a somewhat more ambitious target of reducing expenditure poverty to 24.5% by 2014/15 (NPA, 2010), i.e., to slightly exceed the UN's MDG target.

Absolute poverty is officially defined in Uganda as a "*condition of extreme deprivation of human needs, characterised by the inability of individuals or households to meet or access the minimum requirements for decent human wellbeing such as nutrition, health, literacy and shelter*" (Uganda Bureau of Statistics (UBOS), 2012: 60). The Government argues that, in Uganda, "*there is general agreement that poverty is a lack of basic needs and services such as food, clothing, bedding, shelter, basic health care and education*" (MFPED, 2000b; 2002). These are 'basic needs' definitions of poverty which are very similar in content to the human rights minimum core obligation. In 1991, in General Comment 3, the United Nations Economic and Social Council (ECOSOC) determined that there was: - *"a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights is incumbent upon every State party. Thus, for example, a State party in which any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education is, prima facie, failing to discharge its obligations under the Covenant."* **(ECOSOC, 1991, PARA 10).**

Figure 1.1 shows the significant progress made in reducing extreme monetary poverty in Uganda between 1992/93 and 2019/20. The percentage of those living in poverty has fallen from over 56% in 1992/93to around 20% of the populationin 2019/20 – although caution is needed when looking at such long-term changes as these poverty estimates are not strictly comparable over time. Steady progress was made between 2001/02 and 2012/13 and the MDG target of 25% was met in 2009/10 – five years early. The Uganda NDPI poverty target was also exceeded with – poverty being 21% in 2014/15. Unfortunately, since 2012/13, progress in reducing extreme monetary poverty appears to have stalled and the Poverty Eradication Action Plan (PEAP) target of reducing extreme poverty to 10% by 2017 was not met.

However, in 2015, a revised poverty target was included in the second National Development Plan (NDP II) to reduce poverty to 14.2% by 2019/20 (NPA, 2015). This target was unmet, but this is unsurprising given the significant detrimental effects of the global COVID-19 pandemic. The current (third) National Development Plan (NDP III), published in July 2020, has the much less ambitious target of reducing poverty to 18.5% by 2025.

FIGURE 1.1: **Percent of Monetary Poor People in Uganda (1992/93 to 2019/20)**



Source: UBOS https://www.ubos.org/explore-statistics/

In 2015, the Ugandan Government also committed itself to achieving 17 Sustainable Development Goals (SDG) by 2030 (see Figure 1.2). The primary SDG is to *"End poverty in all its forms everywhere"* during the 21st Century while respecting the principle of leaving no one behind. The Government of Uganda has thus agreed to completely eradicate extreme expenditure poverty by 2030 (i.e., achieve a low expenditure/monetary poverty rate of zero). It has also undertaken to measure and report to the UN on progress on SDG Target 1.2, *"By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions".*

This is the first time there has been a global agreement to reduce multidimensional adult and child poverty. To date, this has been an intractable problem in Africa because the majority of countries have neither official national definitions nor measures of multidimensional adult or child poverty nor anti-poverty policies which specifically target children and young people.

SDG Target 1.2 requires all countries to develop national measures of multidimensional adult and child poverty, which should, ideally, include age-appropriate indicators (as it is clear that the needs of a six-month baby girl and a fifty-year-old man can differ). Most countries find themselves in a similar situation to Uganda in that they have well established methods of reporting monetary poverty at the household level but have not yet developed an official multi-dimensional poverty measure. This report includes a state-of-the-art multidimensional poverty measure which could form the basis for monitoring progress towards halving poverty in all its dimensions between 2016 and 2030.

FIGURE 1.2: **Sustainable Development Goals (SDGs) (2016 to 2030)**

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1.2 DEVELOPMENT IN VARIOUS DIMENSIONS

1.2.1 Life expectancy at birth

In 1918, the average life expectancy in Uganda was just 10 years[2] and the average Gross Domestic Product (GDP) per person was the equivalent of $736 US dollars per year (see Figure 1.3 below). By contrast, a child born in Uganda in 2019 could expect to live to the age of 66 years on average and the GDP per person was $2,190 US Dollars. Thus, Ugandans in 2019 expected to live six times longer than their ancestors[3] and be 2.5 times richer in real terms. However, the global COVID-19 pandemic may have reduced life expectancy and had a significant detrimental economic impact in Uganda.

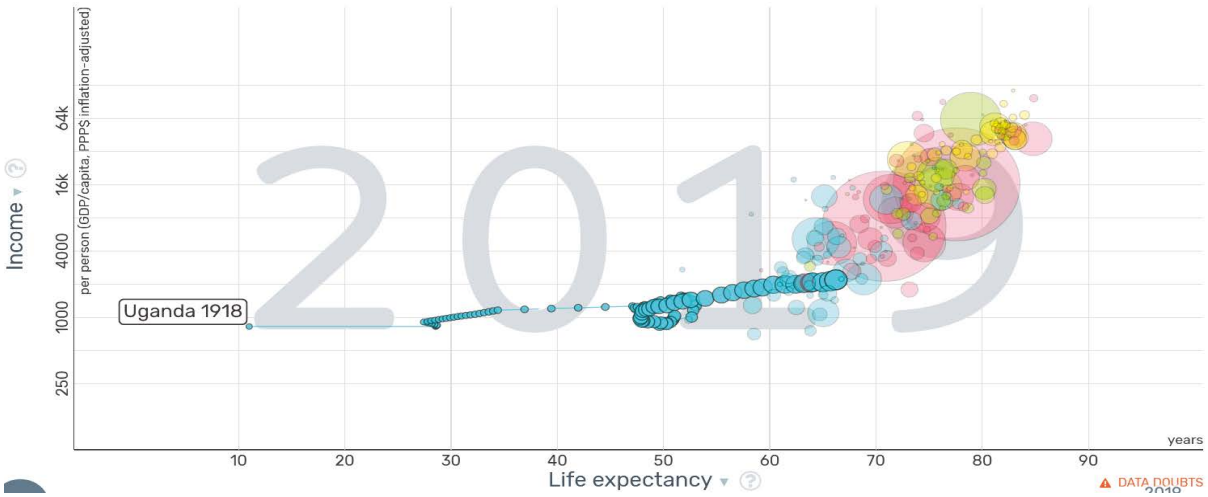
It was not inevitable that the Ugandan people would make this remarkable progress and there were several periods of setbacks over the past 100 years. For example, life expectancy fell between 1924 and 1927. Similarly, both life expectancy and GDP per person also declined for much of the 20 years from 1975 to 1995. However, since 1996, there has been a continuous increase in both life expectancy and average wealth, up until the start of the COVID-19 pandemic in 2020.

Ugandans in 2019 were expected to live

6 times longer

than their ancestors and be **2.5 times richer** in real terms.

FIGURE 1.3: **Change in Life Expectancy and GDP per Person in Uganda (2018 to 2019)**



Source: Gapminder: https://www.gapminder.org/tools - the size of the blue circles represents the number of people in Uganda and shows the increase in population between 1918 and 2019

1.2.2 Child Mortality

Figure 1.4 shows the mortality rates of children aged under five between 1953 and 2020. The blue line is the best estimate of the trend and the shaded grey area on either side of the line shows the possible error of this estimated trend. The other lines shown in Figure 1.4 are raw data from various sources. Child death rates fell from 260 per thousand in 1953 (i.e., more than one in four children died before the age of five) to an estimated of 43 per thousand in 2020 – a more than five-fold reduction over a period of about 70 years. However, there were two periods, from 1971 to 1980 and from 1993 to 1998, when child mortality rates increased in Uganda. The NDP III target is to reduce child mortality to 30 per thousand by 2024/25 (NPA, 2021).

More than **five-fold reduction** in child death rates

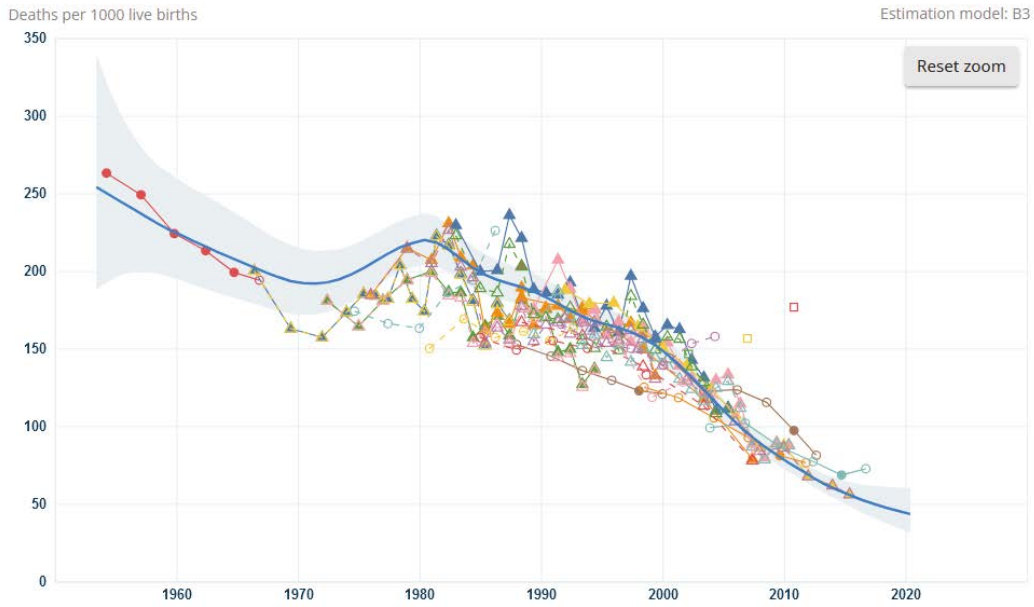
260/1000 in 1953

43/1000 in 2020

2 https://www.statista.com/statistics/1102387/life-expectancy-by-country-during-spanish-flu/

3 In 1918, life expectancy was very low as a result of the global 'Spanish' Flu epidemic. However, even 10 years later, in 1928, average life expectancy in Uganda was still only 25 years.

FIGURE 1.4: **Child Mortality in Uganda (1953 to 2020)**



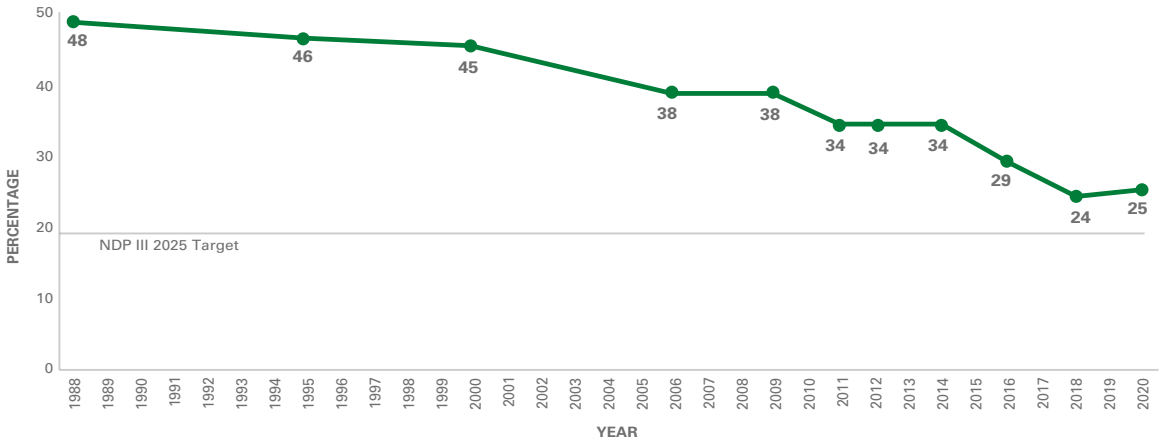
Source: http://www.childmortality.org/index.php?r=site/graph#ID=UGA_Uganda

One of the key reasons for the decline in child mortality in Uganda over the past 30 years has been the success in improving household's access to basic health products and services, such as insecticide-treated bed nets and oral rehydration salts for treating diarrhoea (Nyqvist et al., 2019).

1.2.3 Malnutrition and Stunting

Figure 1.5 shows the percent of children who were stunted (i.e., an indicator of linear growth retardation and cumulative growth deficits in children measured and identified by being too short for their age) between 1998 and 2020. This measure is designed to monitor malnutrition. Stunting is usually a largely irreversible outcome of inadequate nutrition and/or repeated infections during the first 1000 days of a child's life. Child malnutrition can have severe health consequences both during childhood and in later life (Black et al, 2013). Stunting can have both short-term and long-term effects and is associated with diminished cognitive and physical development, poor educational outcomes, lower adult wages and an increased risk of degenerative diseases such as diabetes in adulthood (de Onis, 2013). Child malnutrition is thought to be a causal factor in about half of all deaths of children aged under five (Black, Morris and Bryce, 2003). The NDP III target is to ensure that fewer than one in five young children (19%) are stunted by 2024/25 (NPA, 2021). This target is consistent with the WHO international agreement to reduce stunting among children under five by 40% by 2025 (de Onis, 2013).

FIGURE 1.5: **Percent of Children (aged under 5 years) Stunted (1998 to 2020)**



Source: UNICEF, WHO and World Bank Joint global database on child malnutrition https://data.unicef.org/resources/dataset/malnutrition-data/

Malnutrition in young children can result from a lack of sufficient nutritious food but can also be caused by disease, particularly those resulting in diarrhoea and/or dysentery. Access to safe drinking water and sanitation is crucially important in protecting young children from water-borne diseases that can cause diarrhoea and many other health problems. It is mostly children who live in households living below the national poverty line that are deprived of access to safe drinking water and/or appropriate nutrition.

1.2.4 Access to Safe Drinking Water

Figure 1.6 shows the change in the percent of the population with no access to improved (e.g., 'safe') drinking water in Uganda between 1995 and 2018/19. In 1995, over half (51%) of people did not have access to an improved source of drinking water. By 2019, this had fallen steadily to 22%. The MDG target was to halve the proportion of people without access to safe drinking water by 2015 and Uganda successfully met this target. The NDP III target is to have 100% access to a safe water supply in urban areas and 85% access to safe water in rural areas by 2024/25 (NPA, 2021). The Sustainable Development Goal target (SDG 6.1) is to achieve universal and equitable access to safe and affordable drinking water for all by 2030.[4]

19%

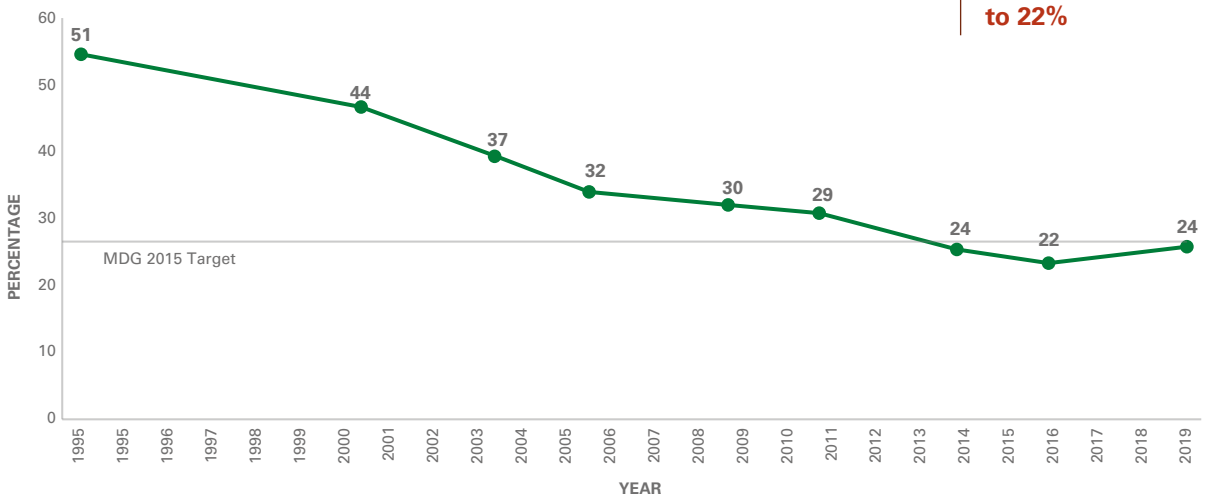
The NDP III target is to ensure that **fewer than one in five** young children are stunted by 2024/25

OVER HALF

51%

of people did not have access to an improved source of drinking water In 1995. **By 2019, this had fallen steadily to 22%**

FIGURE 1.6: **Population With Access to Safe Drinking Water (1995 to 2019)**



Source: STATcompiler: https://www.statcompiler.com/

1.2.5 Population Growth and Demographic Dividend

The fall in child mortality in Uganda has been more rapid than the decline in fertility[5] so the population has grown rapidly as fewer children have died. Uganda now has one of the youngest and most rapidly growing populations in the world. In 2022, the population of Uganda was estimated to be 44.2 million, of which 24.7 million (55.9%) were children under the age of 18. Demographers believe that the average fertility rate will continue to fall in Uganda and, in the next decade, the number of working-age adults in the population will begin to exceed the number of children (see Figure 1.7).

Uganda's population in 2022 was estimated to be 44.2 million

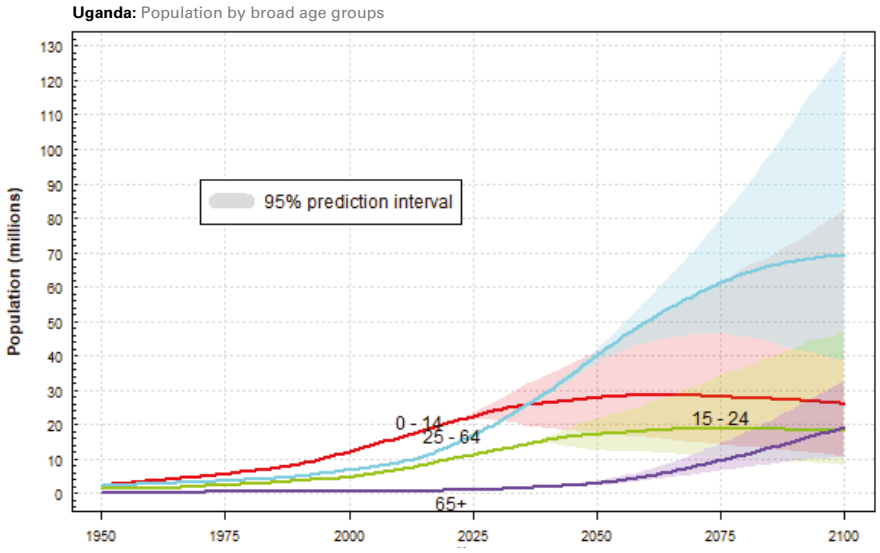
55.9%

were children **under the age of 18**

4 https://sdgs.un.org/goals/goal6

5 Fertility is estimated by UBoS to have fallen on average from seven children per women in 2000 to about 5.5 children per women in 2016 (UBoS and ICF, 2018)

FIGURE 1.7: **Projected Changes in the Population of Uganda (1950 to 2100)**



Source: https://population.un.org/wpp/Graphs/DemographicProfiles/Line/800

As the number of working age adults rises rapidly over the rest of the 21st Century, Uganda has the potential to reap a 'demographic dividend', i.e., rapid economic growth that will enable it to attain Upper Middle Income country status by 2040 (NPA, 2013). On average, working-age adults, as a group, produce more than they consume, while children and the elderly consume more than they produce. The hope is that Uganda will be able to follow the development path of Southeast Asian countries like Malaysia, Thailand and Singapore, where about one third of their economic growth was attributable to favourable demographic conditions.

However, realizing a demographic dividend will require a healthy and well-educated population who are engaged in productive work and this can only be achieved by a substantial investment aimed at improving the lives and skills of poor children (Heckman, 2006; Heckman and Masterov, 2007; NPA, 2014; NPC 2018a; 2018b).

Unfortunately, when governments fail to create productive jobs for young people and do not invest sufficiently in education, health and child poverty reduction, a potential demographic dividend can become a demographic disaster. In North Africa, a youth population bulge resulted in high rates of unemployment and poverty, which were some of the precursors of the civil unrest of the Arab Spring during 2011 – *"A large pool of frustrated, unemployed young people…makes for fertile ground for rebel recruiters"* **(Paasonen and Urday, 2016)**. This demographic issue facing Uganda and some other African countries was summarized by the African Child Policy Forum *"The rapidly increasing children and youth population is both a challenge and an opportunity. Children have the potential to transform Africa – but if neglected, they will exacerbate the burden of poverty and inequality, whilst posing a serious threat to peace, security and prosperity."* **(BEQUELE, 2018).**

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1.2.6 Education

High quality education is key to both improving the skills of the workforce and also to further reducing the fertility rate (Basu, 2002). In 1997, a key policy of free education for four children in every family was introduced and primary enrolment increased rapidly from 2.6 million in 1996 to 6.5 million by the turn of the millennium (MFPED, 2000a). Thus, in only a few years, Uganda achieved the policy goal of universal primary education (UPE). However, the rapid increase in enrolment put a lot of strain on the education system. In 2007, the Ugandan Government adopted a free universal secondary education (USE) policy, the first of its kind amongst Sub-Saharan African countries. Free secondary education was offered to all students who passed the primary leaving examination in 2006 (Chapman, Burton and Werner, 2009) and this resulted in a dramatic rise in secondary school enrolment, especially for girls from poor households (Asankha and Takashi, 2011).

However, the average years of schooling for women has lagged behind that of men, and Uganda lags behind the average for developing countries for the same indicator for both men and women.

Primary enrolment increased rapidly from

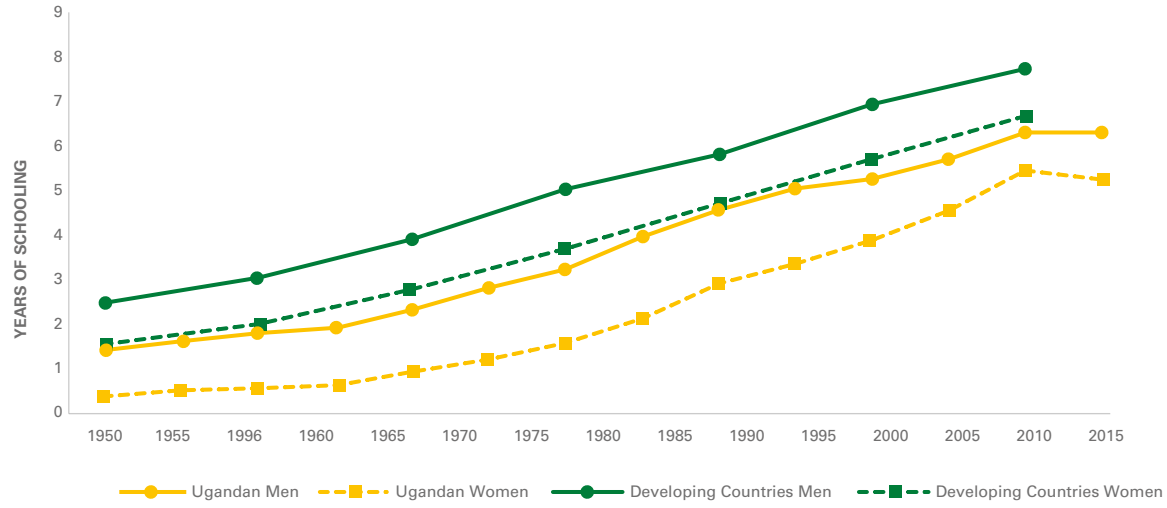
2.6 million

in 1996 to

6.5 million

in 2000

FIGURE 1 8: **Average Years of Schooling (Men and Women 15 to 64 years (1950 to 2015)**



Source: Barro-Lee Estimates of Educational Attainment for the Population Aged 15-64 from 1950 to 2015 V3 Sept 2021 - https://barrolee.github.io/BarroLeeDataSet/BLv3.html

Uganda has made significant progress in increasing the average number of years of schooling of the population (aged 15 and over) amongst both men and women. Figure 1.8 (above) shows that, between 1950 and 2015, the average years of schooling increased from 1.4 years in 1950 to over six years by 2010 for men and from 0.4 years in 1950 to over five years in 2010 for women. However, since 2010, this good progress appears to have stalled, with the average years of schooling falling slightly for both men and women between 2010 and 2015. In 2021 mean years of schooling stood at 4.9 years for women and 6.7 years for men. Uganda has also failed to close the education gap with the rest of the developing world. Both men and women have, on average, 1.8 years' less schooling in Uganda than the average for developing countries in 2021. By comparison, in high human development countries, adults, on average, had about 6.6 years of schooling in 2021. Uganda still has a long way to go if it wants its adult population to become as well educated as the average for countries by 2040. Uganda is facing what is some-

Average years of schooling increased

1950
0.4 YEARS
2021
4.9 YEARS

1950
1.4 YEARS
2021
6.7 YEARS

Source: UNDP HDR 2022 report

times called a '*Red Queen*[6]' problem with regard to closing the education gap with other developing countries i.e., Uganda has made strenuous efforts to improve the educational attainment of its population, but so have many other developing countries.

This brief introduction has shown how poverty and hunger has fallen in Uganda and living conditions have improved over the past hundred years. Some remarkable progress has clearly been made. Nevertheless, Uganda still remains a poor country with some of the lowest health and education outcomes. Although great progress has been achieved, much more still needs to be done.

Uganda may also be in danger of lagging behind other African countries in providing for its children and improving their lives. The African Report on Child Wellbeing shows that in 2008, Uganda was ranked 21st out of 52 African countries[7], but by 2018, it had slipped 19 places and was ranked 40th. In terms of the provision of children's basic needs, Uganda was ranked 44th out of 52 African countries, largely as a result of its relatively low expenditures (as a proportion of its GDP) on social protection, education and health services for children compared with other African countries (ACPF, 2018). The most recent African Report on Child Wellbeing examined the situation of girls and ranked Uganda 34th out of 52 African countries (ACPF, 2020).

The Government of Uganda has set itself anti-poverty targets, including the goal of eradicating extreme poverty and reducing multidimensional poverty by half by 2030. In order to achieve these ambitious goals, valid and reliable poverty measures are needed, which identify the extent and nature of poverty in Uganda. These will provide policy makers with the information they require to develop effective and efficient anti-poverty policies and monitor progress towards the poverty eradication goals.

6 Named after the character in Alice in Wonderland by Lewis Carol who said, *"My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that."* The world changes and we must adapt our education system to the changing world or get left behind.

7 The African Child Policy Forum Child-friendliness Index (CfI) uses quantitative data (27 indicators) to monitor and assess governments' progress towards realising the rights and wellbeing of children. The CfI is based on the three pillars of the United Nations Convention on the Rights of the Child (UNCRC) and the African Charter on the Rights and Welfare of the Child (ACRWC).: Protection, Provision and Participation (ACPF, 2018).

CHAPTER 2

METHODOLOGY

"I am often asked what is the most serious form of human rights violation in the world today and my reply is consistent: extreme poverty." MARY ROBINSON, UN HIGH COMMISSIONER FOR HUMAN RIGHTS, 2002

The purpose of this report is to describe the extent and nature of both monetary and multidimensional child poverty in Uganda. Child poverty is analysed using a rights-based approach which is consistent with the official definitions of poverty in Uganda (see Chapter 1). There is currently no explicit official definition of child poverty. However, a situation analysis of child poverty in Uganda adopted a multidimensional rights-based approach, using household survey data on deprivation of basic needs like water, shelter, sanitation, information, nutrition, education and health. Children deprived in two or more dimensions were considered poor (UNICEF, 2014). The multidimensional approach used for this analysis was first used to successfully measure child and adult poverty with the UNHS 2016/17 survey data. The details are presented in this chapter and in more technical detail in Appendix I.

2.1 DEFINITIONS OF POVERTY

2.1.1 General Definitions

Uganda boasts a well-established tradition of research on poverty, which has identified key drivers of socio-economic and geographical disparities (Lawson et al., 2006; MFPED, 2012; 2014; Okidi and Mugambe, 2002; Pereznieto et al., 2014; Ssewanyana and Okidi, 2007). Poverty has conventionally been assessed at the household level, using monetary indicators, with children subsumed within households as units of analysis. In recent years, however, there have been a number of improvements in the way poverty is assessed, not least the availability of better and more reliable data collected through household surveys and the recognition that children have needs which may not be identical to those of adults (Misinde, 2015; 2017; Pereznieto et al., 2014; UNESCO, 2005; Witter, 2002; Witter and Bukokhe, 2004).

Several qualitative studies with children in Uganda have examined in detail why and how children experience deprivation and their perspectives about pathways out of poverty (Pereznieto et al., 2014, Witter, 2004, Witter and Bukokhe, 2004). What is noticeable in these works, in addition to worries about a lack of money, is how frequently there are concerns about the social and non-monetary dimensions of poverty, like not being able to participate in activities with friends and family or living in unhealthy or precarious settings. Also expressed are concerns about physical safety and personal vulnerability, particularly among young girls, when engaging in work or doing household chores like collecting water, or even just travelling to school. It is elements like these which should be reflected in a socially realistic portrait of poverty.

When measuring adult or child poverty, it is important to understand the conceptual relationship between monetary (low-income) and non-monetary (deprivation) dimensions of poverty. Peter Townsend's theory of relative deprivation clearly explains this relationship:

"Poverty can be defined objectively and applied consistently only in terms of the concept of relative deprivation. [...] Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the type of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs or activities." **(Townsend, 1979, p. 31)**

Thus, Townsend defines "poverty" as a lack of command of sufficient resources over time (e.g., the monetary dimension of poverty) and "deprivation" as an outcome of poverty (e.g., the non-monetary dimension of poverty). In addition, deprivation is a relative phenomenon which encompasses both a lack of material goods and social activities:

"Deprivation takes many different forms in every known society. People can be said to be deprived if they lack the types of diet, clothing, housing, household facilities and fuel and environmental, educational, working and social conditions, activities and facilities which are customary, or at least widely encouraged and approved, in the societies to which they belong." **(Townsend, 1987, p. 126)**

It should be noted that poverty in Uganda is officially defined in both absolute and relative terms (MFPED, 2004). Thus, Townsend's Relative Deprivation theory is consistent with official definitions of poverty in Uganda. It is clear that, in Townsend's conception, poverty is the lack of resources and deprivation is a consequence of

poverty (Townsend, 1987). Therefore, in order to measure poverty scientifically, it makes good sense to use a multidimensional framework, i.e., to measure both low resources/income and deprivation/low standard of living (Townsend and Gordon, 1989). Using such a measurement framework, the poor are identified as those people/households who have both a low standard of living and a low income. They are 'not poor' if they have a low income and a reasonable standard of living or if they have a low standard of living but a high income.

This does not mean that the definition of poverty has changed. The 'poor' still remain those with an *"inadequate command of resources over time,"*. On the other hand, cross-sectional scientific measurement of poverty requires that both low income and deprivation are measured in order to identify the 'correct/optimal' poverty threshold level (Gordon, 2006).

A low standard of living is often measured by using a non-monetary deprivation index (high deprivation equals a low standard of living). Such indices should be broad measures of non-monetary poverty, which are multidimensional in nature and reflect different aspects of living standards, including personal, physical and mental conditions, local and environmental facilities, social activities and customs. Figure 2.1 (below) illustrates these concepts:

FIGURE 2.1: **Multidimensional Definition of Poverty**

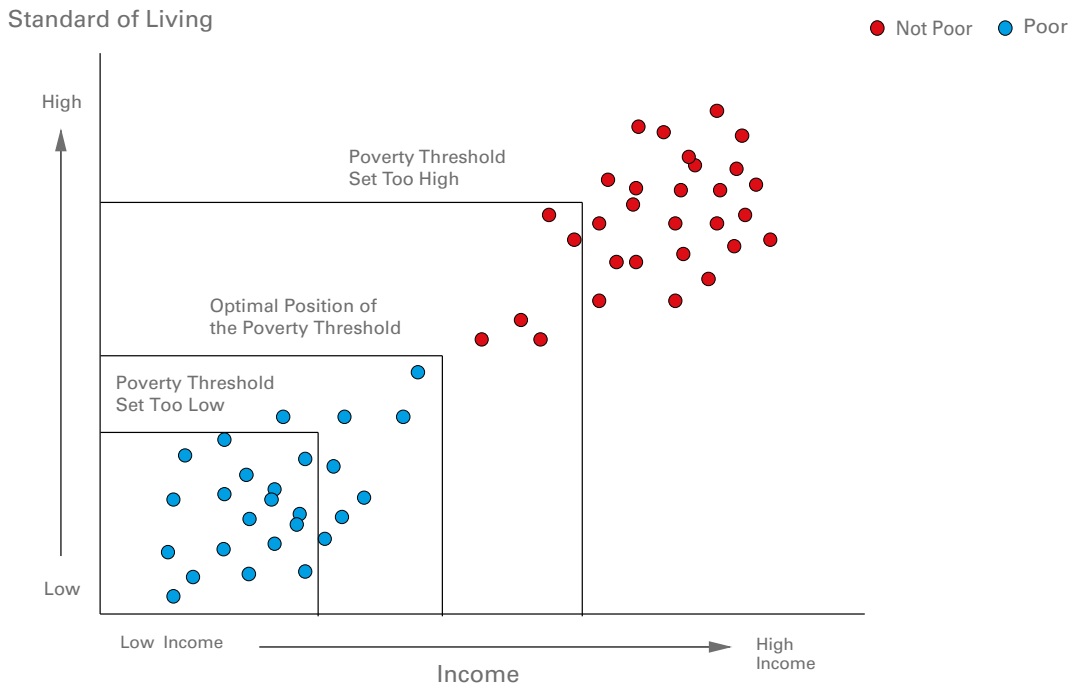


Figure 2.2 provides an illustration of poverty based on two dimensions (Income and Standard of Living). However, the same principles can be used to separate the 'poor' group from the 'not poor' group in three (or more) dimensions. It shows an 'objective' poverty line/threshold that can be defined as the point that maximises the differences **between** the two groups ('poor' and 'not poor') and minimises the differences **within** those two groups. For scientific purposes, broad measures of both income and standard of living are desirable. Standard of living includes both the material and social conditions in which people live and their participation in the economic, social, cultural and political life of the country/society in which they live (Gordon, 2000; Pomati and Patsios, 2018).

2.1.2 Low Income and Deprivation Groups

From the discussion above, it is clear that people/households with a high income and a high standard of living are 'not poor', whereas those with a low income and a low standard of living are 'poor'. However, two other groups of people/households that are 'not poor' can also be identified in a cross-sectional (one point in time) survey, such as the Ugandan National Household Survey as follows:

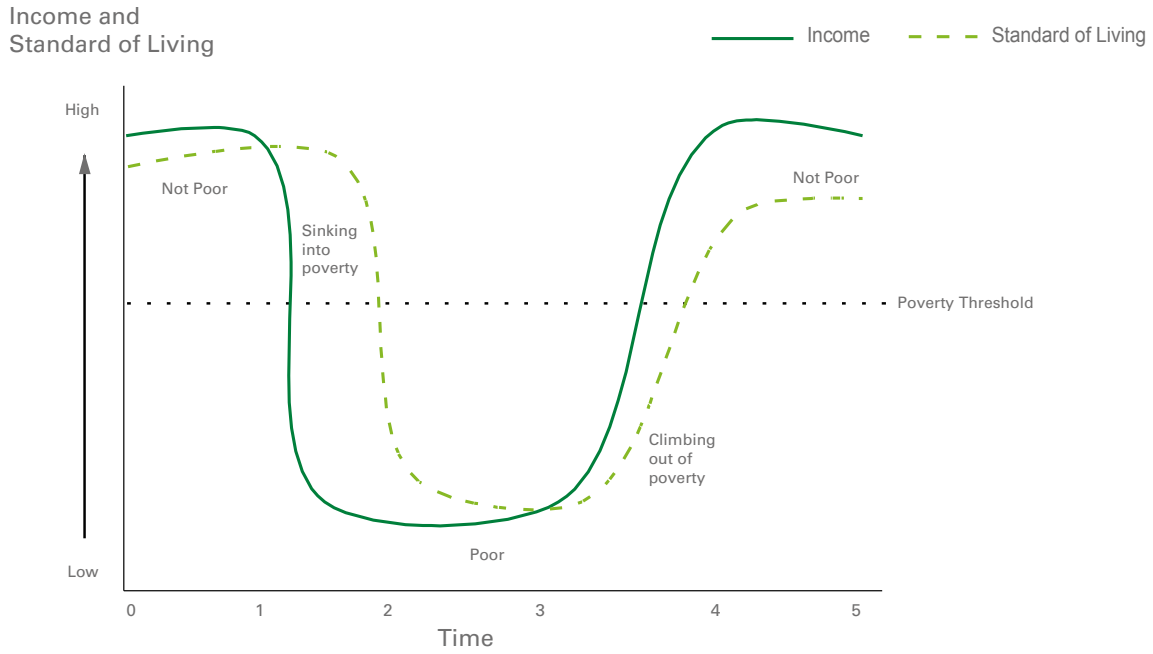
People/households with a low income but no deprivation. This group is currently 'not poor' but, if their income remains low, they will become 'poor' - they are currently vulnerable to sinking into poverty. This situation often arises when income falls rapidly (e.g., due to job loss, crop failure, family breakup, etc.). Still, people maintain their lifestyle for at least a few months, drawing on their savings, the support of family and friends and using the assets accumulated when income was higher. This group is sometimes referred to as vulnerable (Kaztman, 1999) or recently poor (ECLAC/DGEC, 1988).

People/households with a high income but a low standard of living. This group is currently 'not poor' and if their income remains high, their standard of living will rise – they will rise out of poverty. This group is in the opposite situation to the previous group. This situation can arise when the income of someone who is poor suddenly increases (e.g., due to getting a new job, recovering from illness and thus being able to work, etc.). However, it takes time before they can buy the things they need to increase their standard of living. Income can both rise and fall faster than the standard of living. Kaztman (1999) has referred to this group as being in inertial poverty (ECLAC/DGEC, 1988).

A cross-sectional 'poverty' survey can provide some limited but useful information on the dynamics of poverty since it is possible not only to identify the 'poor' and the 'not poor' but also those likely to be sinking into poverty (i.e., people/households with a low income but a high standard of living) and those escaping from poverty (i.e., people/households with a high income but a low standard of living).

Poverty is, by definition, an extremely unpleasant situation to live in, so it is not surprising that people go to considerable lengths to avoid it and try very hard to escape from poverty once they have sunk into it. Therefore, a cross-sectional survey ought to find that the group of households sinking into poverty is larger than the group escaping from poverty since, when income falls, people will try to delay the descent into poverty, but if the income of a poor person increases, they will quickly try to improve their standard of living. Figure 2.2 (below) illustrates this concept:

FIGURE 2.2: **Dynamics of Poverty**



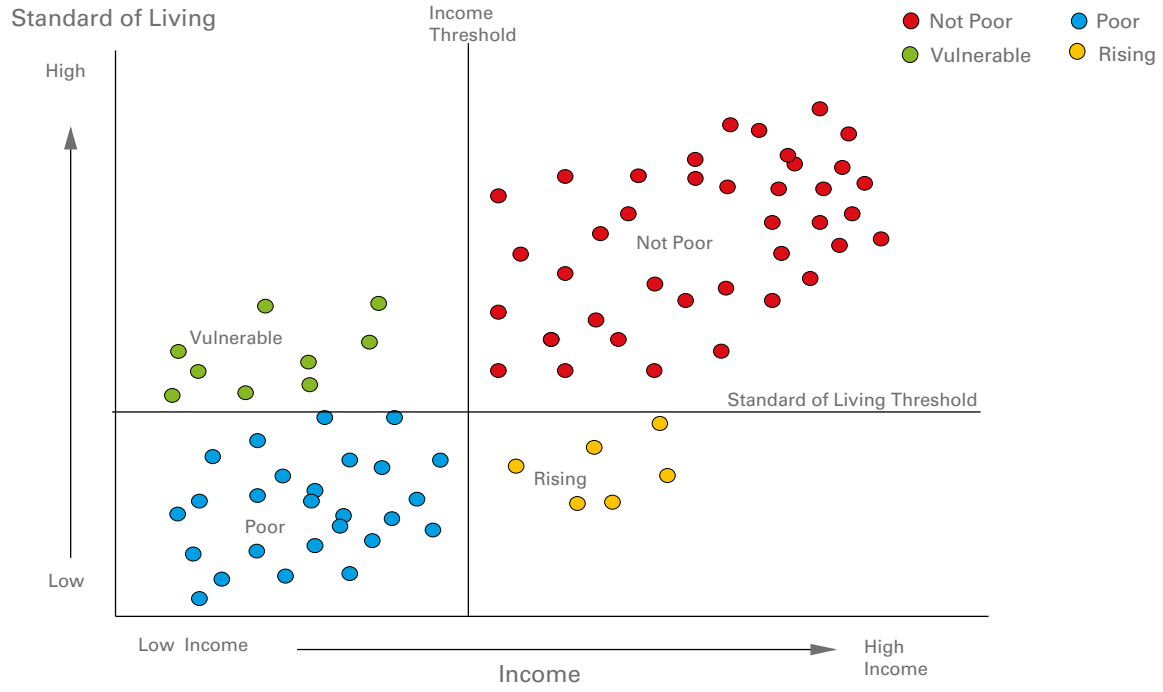
Between time 0 and 1, the household has both a high standard of living (dotted line) and a high income (solid line): it is 'not poor'. At time 1, there is a rapid reduction in income (e.g., due to job loss, the end of seasonal contract income, divorce or separation, etc.). However, the household's standard of living does not fall immediately. It is not until time 2 that the household's standard of living has also fallen below the 'poverty' threshold. Therefore, between time 1 and time 2, the household is 'not poor' but is sinking into poverty (i.e., it has a low income but a relatively high standard of living). At time 3, income rises rapidly, although not as fast as it previously fell. This is because rapid income increases usually result from gaining employment, but there is often a lag between starting work and getting paid. The standard of living also rises after a brief period as the household

spends its way out of poverty. However, this lag means there is a short period when the household has a high income but a relatively low standard of living. By time 5, the household again has a high income and a high standard of living (Gordon et al., 2000).

The implications of the theoretical model of multidimensional poverty dynamics shown in Figure 2.2 are that, if there is a major economic shock which results in a rapid decline in the income of the population (like the COVID-19 pandemic), then income poverty would be expected to increase at a faster rate than deprivation poverty. Conversely, when the economic situation improves, income poverty will decrease first, followed by deprivation poverty.

On the basis of this discussion, it is possible to update Figure 2.2 to give a more realistic picture of movements into and out of poverty. Figure 2.3 illustrates this (Pantazis, Gordon and Levitas, 2006, p.39).

FIGURE 2.3: **Revised Definition of Poverty**



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2.1.3 Multidimensional Poverty and Monetary Poverty

BOX 2.1: MULTIDIMENSIONAL POVERTY MEASUREMENT

The Multidimensional Poverty measure was based on the 22 material and social deprivation questions in the 2019-20 UNHS questionnaire.

The main steps of the consensual multidimensional poverty method are to:

1. Select the possessions and social activities which the majority of respondents agree are essentials/necessities.
2. Identify which adults and children do not have these essential possessions and activities because they cannot afford to have them rather than because they do not want them. This step identifies deprivations that are due to a lack of money rather than a result of consumer choices.
3. Run statistical tests to ensure that each selected deprivation item is a valid and reliable measure of poverty.
4. Sum the items that pass all the tests to create a suitable, valid and reliable deprivation index.
5. Run statistical tests to identify the optimum low household income and deprivation poverty thresholds.

The technical details of the methodology can be found in Appendix I

In addition to the multidimensional child poverty analyses, this report also includes estimates of monetary poverty amongst households with children, using the official Uganda poverty measure. Uganda uses a partial budget standards method to measure poverty[8], which estimates the household expenditure needed to purchase sufficient quantities of 28 different foods for each adult (aged 18-30) in the household to be able to eat 3,000 calories – the assumed average calorie requirement of a young man doing moderately strenuous work (Appleton et al., 1999). Older adults and children in the household are assumed to have lower calorie requirements and this difference is used to adjust/deflate (equivalise) both their food and non-food needs (e.g., a young baby - under 1 - is assumed to need only 27.3% of the expenditure of an adult aged 18-30). All households with sufficient expenditures to be just above this food poverty line are assumed to also have sufficient non-food items/possessions. Adjustments are made to allow for regional and urban/rural price differences and inflation during the survey data collection (World Bank, 2020).

BOX .2.2: COST OF BASIC NEEDS POVERTY LINE

A "cost of basic needs" poverty line is a way of measuring poverty by calculating the threshold of expenditure required to meet the minimum food and non-food needs. The main steps of the "cost of basic needs" method are:

1. Estimate household expenditure based on the UNHS data
2. Estimate the minimum required household expenditure to meet food needs ("food poverty line"/FPL)
3. Estimate the minimum required household expenditure to meet non-food needs ("non-food poverty line" NFPL)
4. Add the FPL and NFPL to produce the "basic needs poverty line" (BNPL)
5. Compare the household expenditure with the BNPL; households with price and inflation adjusted expenditures below the BNPL are considered poor.

Details of the methodological decisions in calculating the official Ugandan poverty line can be found in Appleton et al (1999).

2.2 CONSENSUAL NON-MONETARY POVERTY MEASURES

2.2.1 Definition

Conventional monetary measures of poverty often fail to adequately reflect the reality and lived experience of people in poverty. Meanwhile food-based, calorie norm poverty lines have been abandoned in many (high-income) countries. Their persistence in others (mainly low- and middle-income countries) and dominance in the region is due perhaps more to habit than inherent merit. One significant problem with monetary poverty measures is that they usually treat children as a property of their households, sometimes assuming they have the same needs as adults. That income is equally shared between all adults and children in the household (Nandy and Main, 2015).

8 The World Bank call this method 'cost of basic needs' – although only the cost of a food basket is measured in this methodology.

Monetary poverty measures may also not adequately reflect the costs of children's necessities. For example, the Ugandan poverty line adopted the methodology of Appleton (2001), who assumed that the relative needs of children can be calculated based on their average calorie needs. Thus, a baby is assumed to need only 27% of the expenditure of an 18-year-old adult in order to have an equivalent standard of living[9]. While babies may only need 27% of the calories that an adult man needs, there are many other things that babies need (e.g., health care, clean clothes, etc) and no parent is likely to believe that all the needs of a new baby girl in the family could be met by only spending 27% of what an adult needs – babies cost more than this! Thus, the assumptions made about the income needs of children when calculating the Ugandan expenditure poverty line are liable to result in an underestimate of the 'true' extent of child poverty – particularly for young children (and, to a lesser extent, poverty amongst the elderly) – (see Appendix II in *Multidimensional Child Poverty and Deprivation in Uganda: Volume One, The Extent and Nature of Multidimensional Child Poverty: Appendices*. Kampala, Government of Uganda and UNICEF. https://www.poverty.ac.uk/world/uganda).

Many of the 'problems' of monetary poverty measures can be overcome by using the Consensual Deprivation Approach (sometimes called the Socially Perceived Necessities approach) to poverty measurement (Gordon and Pantazis, 1997; Gordon et al., 2000; Mack and Lansley, 1985; Pantazis et al., 2006). Consensual deprivation measures have been shown to produce practical and policy relevant poverty measures in many African countries, for example, Benin (Nandi and Pomati, 2015), Mali (Nteziyaremye and Mknelly, 2001), South Africa (Noble et al, 2004; 2008; Wright, 2008) Tanzania (Kaijage and Tibaijuka, 1996) and Zimbabwe (Mtapuri, 2011). Thus, Consensual Approach (CA) poverty measures can complement monetary poverty measures in low-, middle- and high-income countries (Boltvinik et al., 2010; Gordon and Nandy, 2012; 2016). Consensual poverty measures:

- Have repeatedly been shown to produce statistically valid and reliable indicators of poverty and deprivation;
- Are based on a well-established sociological theory and reflect internationally accepted definitions of poverty;
- Are relatively straightforward to compute from modules added to existing household surveys;
- Produce indicators which reflect the multidimensional nature of poverty and can be used to report on the Sustainable Development Goal Multidimensional Poverty target (SDG 1.2);
- Allow for the analysis of intra-household disparities, e.g., between genders or generations within a household;
- Can be used to separately assess the poverty of adults and children with age appropriate measures;
- Provide the general public with a say in what constitutes acceptable living standards in their own countries, thus introducing a democratic element to the definition of poverty and ensuring socially realistic poverty measurement;
- Have results that are easy to understand and are policy relevant;
- Have a 35-year track record of continuous methodological development and have been used successfully in over 50 countries.

2.2.2 Measuring Consensual Deprivation

The 1983 Breadline Britain study pioneered what has been termed the 'consensual' or 'perceived deprivation' approach to measuring poverty. Other poverty studies around the world have widely adopted this methodology.

The consensual deprivation approach sets out to determine whether some people's standard of living is below the minimum acceptable to society. It defines poverty from the viewpoint of the public's perception of minimum need:

"This study tackles the questions 'how poor is too poor?' by identifying the minimum acceptable way of life for Britain in the 1980s. Those who have no choice but to fall below this minimum level can be said to be 'in poverty'. This concept is developed in terms of those who have an enforced lack of socially perceived necessities. This means that the 'necessities' of life are identified by public opinion and not by, on the one hand, the views of experts or, on the other hand, the norms of behaviour per se". **(Mack and Lansley, 1985).**

9 In this research we have used the following equivalisation scale 1.0 First Adult, 0.8 additional people (14+), 0.5 Child (<14).

The methodology thus tries to distinguish deprivations resulting from financial constraints (e.g., a lack of money/resources) from deprivations due to choice or other reasons (e.g. ill health, discrimination, etc.). It improves on Peter Townsend's original deprivation measurement methodology to meet Piachaud's (1981) critique about the importance of distinguishing choice from economic constraint:

"To choose not to go on holiday or eat meat is one thing: it may interest sociologists, but is of no interest to those concerned with poverty. To have little or no opportunity to take a holiday or buy meat is entirely different." **(Piachaud, 1981).**

In addition, the consensual deprivation methodology only defines an item or activity as a deprivation if the majority of the surveyed population believes it to be a necessity of life which everyone should be able to afford and no one should have to do without. In this way, the public's views are incorporated into the measurement of poverty and a socially realistic measure can be produced, i.e., a deprivation measure with broad public support.

Implementing the consensual poverty measurement method is simple, straightforward, and consists of two stages. First, public opinion is measured by asking survey respondents to distinguish if a range of possessions and activities are 'necessities of life[10] which all people should be able to afford and not have to do without'. This is the *definition* component of the question module (Fifita, 2016). Then, survey respondents are asked if they have each possession or do each activity and if they do not have it/do it if this is because they 'do not want it' or because they 'cannot afford it' or for 'some other reason'. This is the *measurement* component of the question module. Only possessions and activities which the majority of the public believes are 'necessities of life' and which respondents 'do not have and cannot afford' are considered to be deprivations.

The exact question wordings vary slightly by mode of collection and cultural and language translation. The Ugandan Bureau of Statistics (UBOS) has asked the consensual deprivation definition and measurement questions in both the 2016/17 and the 2019/20 Uganda National Household Survey as follows:

CHILD ITEMS (ANY ONE BELOW 18 YEARS OF AGE)

Please say whether you think each of the following is essential for every parent or caregiver to be able to afford for children they care for in order for them to enjoy an acceptable standard of living in Uganda today.

If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER'.

Following on from the definitional questions, respondents are then asked: '*Please say whether you have or do each of the following. If you do not have the item please say whether you don't have it because you can't afford it, you don't have it because you don't want it, or don't have it for another reason.*

So the possible answers are:

1 'HAVE IT',
2 'DON'T HAVE AND CAN'T AFFORD',
3 'DON'T HAVE AND DON'T WANT',
4 'DON'T HAVE, FOR ANOTHER REASON'.

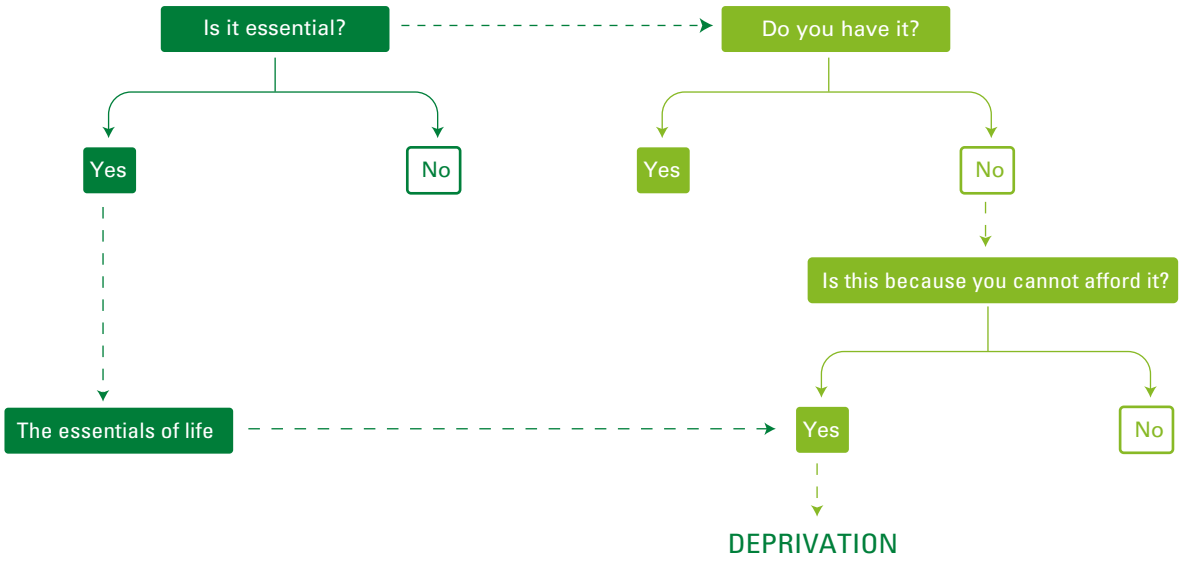
For activities (as opposed to items), the possible answers are

1'DO',
2'DON'T DO AND CAN'T AFFORD',
3'DON'T DO AND DON'T WANT TO DO'
4'DON'T DO, FOR ANOTHER REASON'.

10 In some surveys, the word 'essentials' has been used instead of 'necessities' (e.g., in Australia)

Figure 2.4 (below) shows the similar question structure and flow that has been used in Australian consensual deprivation surveys (Saunders and Wong, 2012). Survey respondents were asked to provide a 'Yes' or 'No' answer to three questions about each item: Is it essential? Do you have it? And, if not, is this because you cannot afford it?

FIGURE 2.4: **Identifying the Essentials of Life and Deprivation in Australia**



BOX 2.3: CONSENSUAL APPROACH TO POVERTY MEASUREMENT

The consensual deprivation approach/tool aims to identify key areas of deprivation suffered by children, whilst democratizing the definition and measurement of national poverty indicators. This is done through the use of an indicator of multidimensional poverty which reflects the inability of households to afford to purchase items or do things which a majority of Ugandans believe to be necessary. These items, identified by over 50% of the population are defined as "socially perceived necessities" (SPNs). The approach, known as the Consensual Approach, and its principles have been successfully applied in high, medium, and low-income countries all over the world, including South Africa, 28 countries across the European Union, Australia, Bangladesh, Benin, Vietnam, Mali, Tanzania, Zimbabwe, Japan, and South Korea.

Although there are minor differences in the question wordings used in different countries to measure consensual deprivation, it is important to note that all these methods have produced robust results and have achieved high response rates and positive feedback from survey respondents. The Uganda 2019/20 UNHS survey included 16 child-specific deprivation questions and six household deprivation questions, which are shown below. These questions had previously been used in the 2016/17 UNHS.

In addition, UBoS ran a series of 60 focus groups conducted in 2017 as part of development work associated with the Ugandan National Household Survey (UNHS) module on consensual deprivation. The focus group results were designed to inform analysis and interpretation of survey indicators of child deprivation in the 2016/17 UNHS dataset and assist subsequent survey development in this area. To improve the understanding about the nature of poverty and how it is experienced in Uganda today the focus groups discussed:

- How Ugandans understand terms like 'poverty' and 'necessities'?
- Is there a shared understanding of these terms amongst Ugandans?
- What do these understandings tell us about the nature of human needs?
- How do the Ugandan public make decisions about needs and entitlements? Do these differ?

Understanding public perceptions about and responses to these questions is critical in developing consensual deprivation indicators that genuinely reflect public views of the nature, symptoms and effects of child poverty. In doing so, it seeks to better understand the goods, activities, amenities and services considered by the public

to constitute minimally adequate living standards in Ugandan society today. The detailed results from the findings of the 60 focus groups have been published in *Multidimensional Child Poverty and Deprivation in Uganda: Volume Two, The Views of the Public.* Kampala, Government of Uganda and UNICEF. https://www.poverty.ac.uk/world/uganda

This type of social inquiry reflects a long tradition within poverty research of attempting to establish what constitutes human needs. For example, over one hundred years ago, Charles Booth (1902, p. 33), argued that the "'*poor' may be described as living under a struggle to obtain the necessities of life and make both ends meet*." The 1983 Poor Britain study, which invented the Consensual Deprivation method, was the first to capture what 'standard of living' is considered unacceptable by a society as a whole. This was a radical departure from previous poverty studies, which relied on the role of 'experts' (Pantazis et al, 2006).

One of the major achievements of the Mack and Lansley (1985) study was that it established that the minimum publicly acceptable standard of living covered not only the basic essentials for survival (such as food and shelter) but also the ability to participate in society and play a social role:

"*for the first time ever, that a majority of people see the necessities of life in Britain in the 1980s as covering a wide range of goods and activities, and that people judge a minimum standard of living on socially established criteria and not just the criteria of survival or subsistence*". **(Mack and Lansley, 1985, p 55)**

The validity of the Consensual Approach to measuring poverty rests on the assumption that there is a universal minimum accepted by society that also reflects actual living conditions. The implications of this are that differences in views between social groups about what constitutes an acceptable living standard are relatively small. Otherwise, the definition of an unacceptable standard of living just becomes the opinion of one group against another. Consensual deprivation surveys in different countries around the world have confirmed that in any given country there exists *"a high degree of consensus, across all divisions in society, on the necessity of a range of common possessions and activities. Society as a whole clearly does have a view on what is necessary to have a decent standard of living"* **(Gordon and Pantazis, 1997, p. 96).**

A major strength of the Consensual Approach is that it allows definitions and measures of poverty to reflect the possessions and social activities that people believe to be important. In doing so, it provides robust estimates of the multidimensional nature of poverty and allows the public to participate in the definition and measurement of poverty. The right to participate equally and in a non-discriminatory manner is a fundamental tenet of Human Rights, i.e., there is a right "*to directly and indirectly participate in political and public life.*[11]". Thus, the Consensual Approach to measuring multidimensional poverty is consistent with the right of Ugandan Citizens to participate in political and public life.

The step-by-step technical guide describing how the multidimensional poverty line was calculated can be found in the Appendices at the end of this report.

2.3 THE RELATIONSHIP BETWEEN CHILD POVERTY AND CHILD RIGHTS

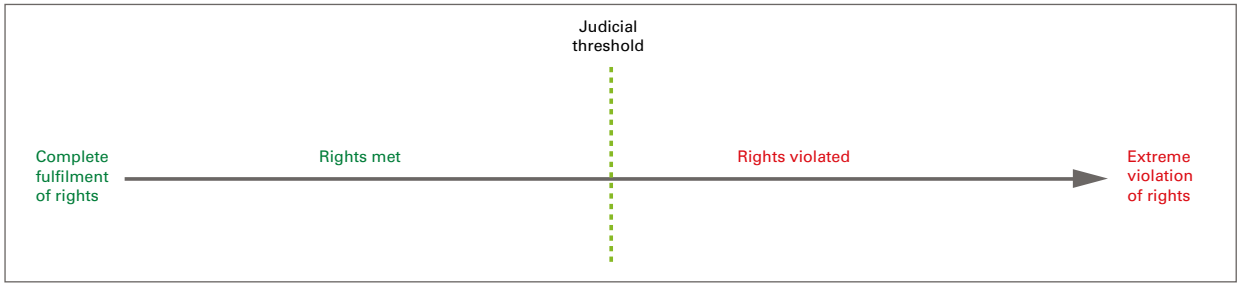
2.3.1 Different Norms for Child Rights

The United Nations Convention on the Rights of the Child (UNCRC) does not contain an explicit human right to freedom from poverty nor does the Constitution of Uganda. Hence, to measure poverty in terms of rights, a selection process is required to match these rights to the deprivations of basic needs that characterise poverty. Giving greater priority to selected groups of rights does not imply that rights are divisible in any ultimate or 'perfect' sense. It allows planned actions to be taken, progressively by stages, to achieve agreed ends (Pemberton et al, 2007). Human rights are interrelated, so the fulfilment of some rights is reliant on the prior realisation of others (Doyal and Gough, 1991); e.g., the right to family life is dependent on the right to life, as you cannot enjoy family life if you are dead.

11 See https://www.ohchr.org/EN/Issues/Pages/EqualParticipation.aspx

Several of the rights, as expressed in the relevant constitutions, charters and conventions, are ambiguous or imprecise. This is particularly the case with economic, social and cultural rights, where access to some rights is easier to define and measure than others. The right to survival — preventing early deaths — is less complicated to measure than access to adequate health or educational services. Many phenomena (such as 'health') can be considered to be on a continuum ranging from 'good health' to 'poor health/death' (UNDP, 2000). Similarly, fulfilment of rights can be considered to be on a continuum ranging from complete fulfilment to extreme violation. Courts can make judgments on individual cases on the correct threshold level at which rights are found to have been violated or fulfilled (see Figure 2.5).

FIGURE 2.5: **Continuum of Rights**



Regrettably, there is little international case law at present that identifies the location of this 'judicial' threshold with respect to many economic, social and cultural rights, such as the right to health care. In the absence of judicial threshold criteria, there are three main approaches that have been used to select deprivation indicators and set threshold values, using rights-based approaches to measure poverty.

International norms – for example, the Millennium Development Goal or Sustainable Development Goal target indicators. This approach, adopted by Gordon et al. (2003) in developing their absolute child poverty measures for UNICEF, is sometimes called the 'Bristol' method. The strength of this method is that it facilitates international comparisons of the extent and nature of multidimensional child poverty and over 50 countries have used this methodology. However, the weakness of the Bristol methodology is that some or all of the deprivation thresholds may be sub-optimal for a particular country, i.e., they may not be the most appropriate or 'best' deprivation thresholds to use (Pemberton et al., 2005; 2007).

National and expert thresholds – this approach was used by CONEVAL (the National Council for the Evaluation of Social Development Policy) in Mexico to develop the official multidimensional poverty measure (CONEVAL, 2010; Gordon, 2010). The dimensions of poverty were specified in the General Law of Social Development, which had unanimous support in the Mexican legislature. Deprivation threshold criteria were determined as follows (CONEVAL, 2010):

1. Apply legal norms, if they exist
2. Apply specific criteria defined by experts of specialized public institutions working on the field of each deprivation indicator.
3. Apply criteria based on statistical analysis.
4. The Executive Committee of CONEVAL shall determine the threshold after taking into consideration the opinion of experts

The advantage of this method is that the deprivation thresholds are based upon national norms. The weakness of this method is that there is controversy and lack of agreement about a number of the expert set thresholds and the views of the Mexican public on the acceptability of the thresholds have not been taken into account (Guillen, 2017).

Consensual Deprivation – this approach has been used in over 50 countries, including European Union member states and many countries in Asia, Africa, Oceania and the Americas. It allows a representative sample of the public to identify the necessities of life which all children (and adults) should be able to afford and no one should have to do without due to a lack of money. Only deprivation items are selected which the majority (i.e., more than 50%) of respondents agree are necessities/essentials. This is sometimes called a 'democratic'

method as it incorporates the views of the public into the measurement of poverty (Mack and Lansley, 1985). The advantage of this method is that it produces socially realistic and culturally appropriate poverty measures which have the support of the majority of the population and allows the public to participate in decision making about poverty measurement in a fair and non-discriminatory manner, i.e., the survey sample is representative and every respondent has an equal vote in determining the necessities of life. The main disadvantage of this method is that it requires additional questions about poverty to be included in what may already be lengthy, time consuming and expensive social surveys.

For this study the Consensual Deprivation method has been used to measure multi-dimensional child poverty, as it has a range of advantages over the other methods and in particular it is more sensitive to the different needs of children and adults. This results in a more valid, reliable and policy relevant assessment of the extent and nature of child poverty in Uganda.

2.3.2 Legal Requirements in Uganda

The Constitution of Uganda[12] is taken as a legal expression of the will of the people of Uganda, which has the full support of all politicians and organs of government. The Constitution is explicit about the social and economic rights to which all Ugandans are entitled. Article XIV makes clear that:

"The State shall endeavour to fulfil the fundamental rights of all Ugandans to social justice and economic development, and shall, in particular, ensure that

a) All developmental efforts are directed at ensuring the maximum social and cultural well-being of the people; and

b) All Ugandans enjoy rights and opportunities and access to education, health services, clean and safe water, work, decent shelter, adequate clothing, food security and pension and retirement benefits."

In addition to Article XV, a number of additional social, economic and cultural rights are included in the Ugandan Constitution, to which all citizens are entitled. These rights (listed below) form the basis for the analyses of poverty in this report, i.e., how poverty affects the constitutional right to education, water and sanitation, etc. The numerals in parenthesis refer to the relevant articles and chapters in the Ugandan Constitution:

- Education (Article XVIII)
- Water and sanitation (Article XXI)
- Food security (Article XXII)
- Decent shelter (Article XVb)
- Pensions and retirement benefits (Article XVb)
- Adequate clothing (Article XVb)
- Recreation, sport and leisure (Article XXVII)
- Health (Article XX)
- Birth registration (Chapter 2, Section 18)
- Child labour (Chapter 2, Section 34)
- Information access (Chapter 2, Section 41)

Chapter 4 of the Constitution also provides rights against discrimination on the grounds of sex, race, colour, ethnic origin, tribe, birth, creed or religion, or social or economic standing, political opinion or disability. This provides clear guidance for the analysis of poverty and deprivation, to identify if these important social and economic groups have equal opportunity and access to services and a decent standard of living. Thus, the analyses in this report make use of these population groups (where relevant information is available) as the basis for comparisons of poverty and deprivation outcomes.

Poverty often denies both adults and children their fundamental constitutional and human rights. Severe or extreme poverty can cause children permanent damage – physically, intellectually, socially and emotionally. It can stunt and distort their development and destroy opportunities for fulfilment, including the roles they are

12 http://www.statehouse.go.ug/sites/default/files/attachments/Constitution_1995.pdf

expected to play successively as they get older in their family, community and society. Both research and administrative data show that investment in basic social services and social protection for children are key elements to ensure success in alleviating child poverty. It also shows that a minimal level of family resources to enable parents to meet the needs of their children is required even when families are prepared to put their own needs and/or the needs of work and other social claims upon them in second place. If there are insufficient resources to satisfy children's needs, however hard parents try, this can cause other obligations and relationships to crumble (Gordon et al., 2003).

Therefore, children's needs must be distinguished from those of adults. For example, Lansdown (1998) makes the following important points:

- children are people who have to be accorded equal status to that of adults;
- children's healthy development and civil participation are integral to the creation of successful countries;
- children are particularly vulnerable as a consequence of their development and dependence;
- children are disproportionately affected by the activities and omissions of government, due to their reliance upon public services; and
- children are universally excluded from participation in political processes.

Thus, this report describes the extent and nature of child poverty in Uganda based upon age-appropriate indicators which reflect the different (and also similar) needs of children when compared with adults.

2.3.3 Details of the Uganda National Household Survey (UNHS) 2019/20

Nested within the UNHS 2019/20 were carefully administered questions aimed at capturing the consensual deprivation approach. This was expected to generate a wide range of quantitative and qualitative data in support of the Government's efforts to broaden the scope of poverty analysis and its commitment to the SDG agenda.

The UNHS 2019/20 survey data collection was interrupted by the COVID-19 restrictions (March to June 2020). It is a representative survey of the household population and excludes people living in institutions like police and army barracks, prisons, etc (UBOS, 2021b).

- A two-stage stratified sampling design was used. At the first stage, EAs were grouped by districts of similar socio-economic characteristics and by rural-urban location. The EAs were then drawn using Probability Proportional to Size (PPS). At the second stage, households were drawn using Systematic Random Sampling (SRS).
- A total of 1,651 Enumeration Areas from all the 129 districts in Uganda were included in the sample, which aimed to interview 10 households per EA (16,510 households in total). A final sample of 15,786 were selected for interview. Of these households, 13,732 were interviewed giving a national response rate of over 90% (after excluding empty dwellings, etc.).
- The data collection was carried in two phases:
  - First phase was in the period of September 2019 to February 2020 and 6,281 households were covered
  - Second phase was from July to November 2020 and 7,451 households were covered
- The survey provides representative estimates for:
  - the country as a whole;
  - rural and urban areas;
  - fifteen sub-regions; Acholi, Ankole, Bukedi, Bugisu, Bunyoro, Busoga, Kampala, Karamoja, Kigezi, Lango, North Buganda, South Buganda, Tooro, Teso, and West Nile.
- Other important sub-groups include a comparison of the situation before and during COVID, Peace and Recovery Development Plan (PRDP) Districts, and Mountainous Districts (UBOS, 2021b).

CHAPTER 3

PERCEPTIONS OF CHILD POVERTY IN UGANDA

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Previous analysis for UNICEF Uganda and UBoS, using the 2016/17 Uganda National Household Survey (UNHS), showed there to be clear and high levels of support among Ugandans for a range of items and activities important for meeting the material and social needs of children and their families. In 2016/17, the UNHS asked about separate lists of items for children and adults, as well a list of items applying to all household members (i.e., all adults and children); in UNHS 2019/20, however, respondents were only asked about items relating to children and household needs, not the needs of adults. The data presented in this chapter demonstrates clearly that four years after the first survey, consensus about socially perceived necessities (SPNs) – that is, items which most Ugandans (>50%) considered necessary, which no one should have to go without due to a lack of money – remains high across Uganda.

Consensus can be demonstrated in several ways. Here, a combination of elements is used:

Heatmaps with cells shaded red for items where a higher proportion of respondents think an item is necessary and green where fewer respondents think an item is necessary. Items that less than 50% of respondents consider a necessity are highlighted in bold;

Scatter plots show whether the patterning of preference for individual items differs between groups, e.g., men and women, and

Bland-Altman plots, which show the relationship between paired variables, as well as the degree of agreement, are shown by plotting the difference of two paired measurements against the mean of the two measurements.

Respondents are divided by gender, age, education, monetary poverty status and geography to show what proportion of adults believe which items are necessities for children. Respondents were asked to consider whether each item was "*essential for every parent or caregiver to be able to afford for the children they care fore in order for them to enjoy an acceptable standard of living in Uganda today'.*

3.1 CONSENSUS ON NECESSITIES FOR CHILDREN IN UGANDA IN 2019-20 UNHS

The heatmap (Table 3.1 below) shows that across Uganda, and between men and women, there is a high degree of support that most of the items listed are considered necessities for children. The items cover a range of material and social needs and are directly linked to the social and economic rights of children as set out in the Ugandan Constitution and in important international agreements such as the UNCRC. This consensus is reflected across all the heatmaps presented in this chapter.

TABLE 3.1: **Proportion(%) Respondents Thinking Items to be Necessary, By Respondent's Gender and Age, 2019/20 UNHS**

ITEMS FOR CHILDREN	NATIONAL	FEMALE	MALE	18-24	65+
(c) A visit to a health facility when ill and all the medication prescribed to treat the illness	95	95	95	94	96
(c) Two sets of clothing	92	92	93	92	91
(c) Three meals a day	92	92	91	92	90
(c) All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, etc.	86	86	87	81	86
(c) Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	85	83	86	83	84
(c) Own blanket	82	81	84	81	84
(c) Two pairs of properly fitting shoes, including a pair of all-weather shoes	80	78	82	78	77
(c) Own bed	78	77	79	75	79
(c) Own room for children over 10 of different sexes	78	77	79	73	80
(c) Some new clothes (not second hand or handed on/down)	68	66	70	68	64
(c) Books at home suitable for their age (including reference and story books)	62	62	62	57	59
(c) Bus/taxi fare or other transport (e.g. bicycle) to get to school	62	61	63	61	58
(c) To be able to participate in school trips or events that cost money	58	57	60	55	55
(c) A desk and chair for homework for school aged children	50	48	54	47	51
(c) Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid	39	38	41	39	39
(c) Educational toys and games	38	37	40	38	37
ITEMS FOR ALL HOUSEHOLD MEMBERS	**NATIONAL**	**FEMALE**	**MALE**	**18-24**	**65+**
(H) To be able to make regular savings for emergencies	91	90	91	90	90
(H) Enough money to repair a leaking roof for the main living quarters	84	83	84	81	83
(H) To be able to replace broken pots and pans for cooking	76	76	76	73	75
(H) Have your own means of transportation (e.g. car, bike, motorcycle, etc)	73	69	77	71	69
(H) Enough money to repair or replace any worn out furniture	70	67	72	66	70
(H) Enough money to repair or replace broken electrical goods, e.g. a refrigerator	53	52	55	50	52

Over 90% of respondents considered such items as having three meals a day, having two sets of clothing and being able to visit a health facility when ill and get all prescribed medications to be necessities for all children. Over three-quarters of respondents believed all children should have toiletries to be able to wash every day (e.g., soap, hairbrush/comb), have at least two pairs of properly fitting shoes (including an all-weather pair), have their own bedding, and - for children over 10 years of age, of different sexes - to have their own bedroom.

Over 85% of respondents thought households with children should have sufficient resources to cover all fees, uniforms of the correct size and equipment required for school, e.g., books, school bags, lunch/lunch money, etc. At the other end of the scale, there were items for which there was less than 50% support. These included children having educational toys and games (38%) and having presents once a year on special occasions such as birthdays, Christmas or Eid. That said, around half of respondents considered these two items desirable (but not essential). Only around one in seven (13-14%) respondents considered them not essential or desirable.

Agreement and consensus can be demonstrated in several ways. While heatmaps demonstrate the horizontal consensus across groups, e.g., comparing the views of men with women, these data can also be used to illustrate the extent of difference or similarity.

The data from the heatmap can be used to create scatter plots (Figures 3.1 and 3.2). All points on the graph lie on or close to the 45-degree line which passes through the origin, implying that the views of men and women respondents about the necessities of life for children are very similar in Uganda.

FIGURE 3.1: **Scatterplot Showing Agreement Between Men and Women Over Necessities for Children and Households in Uganda, UNHs 2019/20**

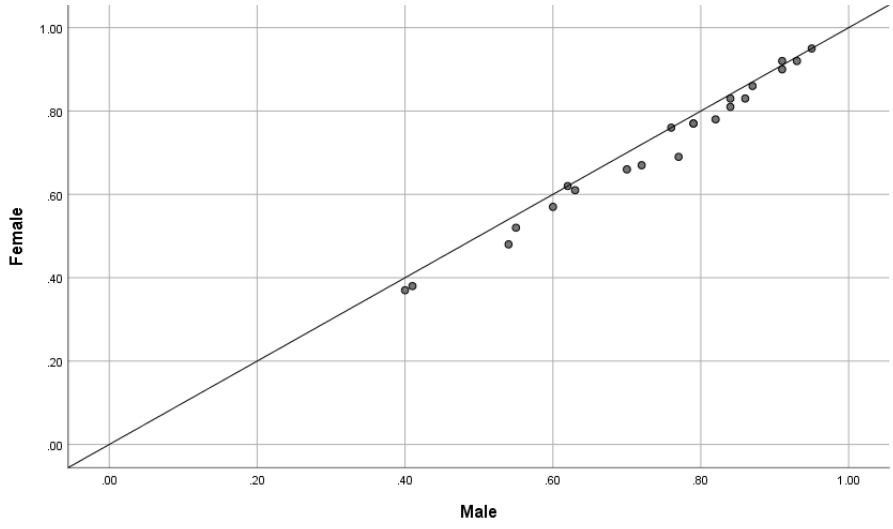
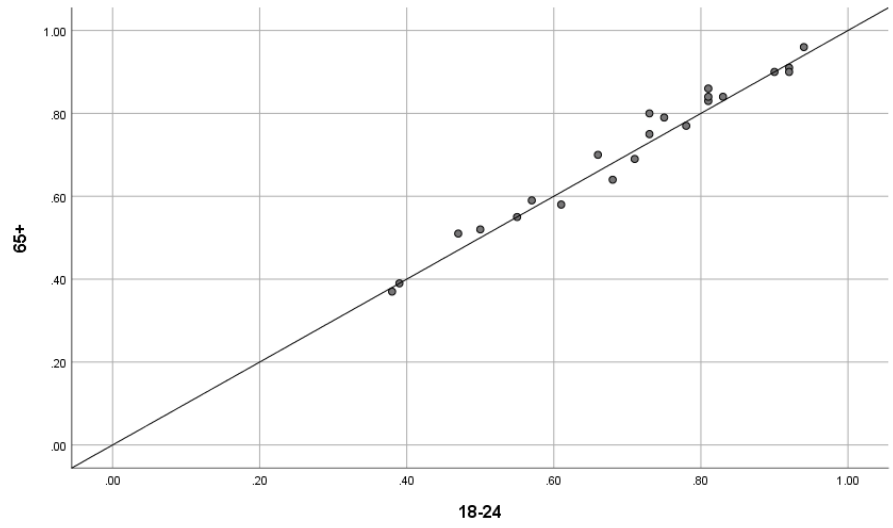


FIGURE 3.2: **Scatterplot Showing Agreement Between Age Groups Over Necessities for Children and Households in Uganda in UNHS 2019/20**



OVER
90%
respondents considered items as having three meals a day, having two sets of clothing and being able to visit a health facility

OVER
85%
respondents thought households with children should have sufficient resources to cover all fees, uniforms of the correct size and equipment required for school

The views of men and women respondents about the necessities of life for children **are very similar in Uganda.**

In addition to heatmaps and scatterplots, the degree of agreement between groups can be shown using Bland-Altman plots. Here, the data on perceptions of necessities are used to calculate the difference between men and women's responses (i.e., of considering an item as necessary) on the vertical Y-axis (A-B) and the average score between men and women for individual items on the horizontal X-axis ((A+B)/2). Three horizontal reference lines are also presented. The middle one is the average difference between men's and women's views, with lines to signify upper and lower bounds of ±1.96*(standard deviation of the measurement differences). It is recommended that 95% of the data points should lie within ± 1.96 standard deviations of the mean difference (Giavarnia, 2015).

Figure 3.3 shows that the average difference (middle line) between men's and women's views is about 2%, i.e., on average, about 2% more men said a child deprivation item was a necessity compared with women. One item lies outside the 95% bounds, which is a household-level item relating to being able to have their own means of transport. Of men, 77% believe this to be a necessity compared with 69% of women, which is a potentially significant difference in views.

Figure 3.4 shows the difference in the views of age groups. There is one item out of bounds. In this case, it is an own room for children over 10 of different sexes. Of older respondents (aged over 65), 80% believed that this was a necessity compared with 73% of younger respondents (aged 18 to 24). This is a possibly significant difference.

FIGURE 3.3: **Bland-Altman Plot Showing Agreement Between Men and Women Over Necessities for Children and Households in Uganda, UNHS 2019/20**

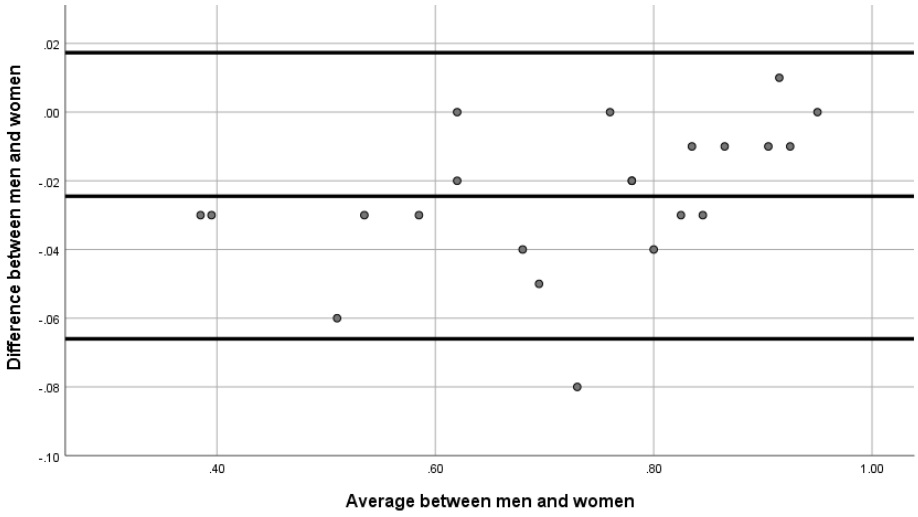
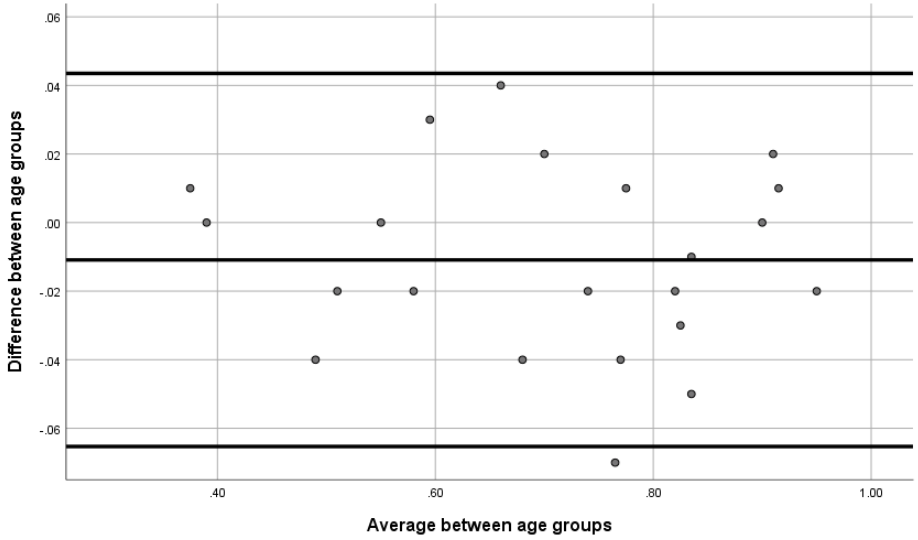


FIGURE 3.4: **Bland-Altman Plot Showing Agreement Between Age Groups Over Necessities for Children and Households in Uganda, UNHS 2019/20**



2%

more men said a child deprivation item was a necessity compared with women

77%

of men believe being able to have their own means of transport to be a necessity **compared with 69% of women,**

80%

of respondents aged over 65 believed that own room for children is a necessity compared to

75%

of younger respondents aged 18 to 24

The heatmap presented in Table 3.2 (below) shows similar results to those presented earlier, this time grouping respondents by education attainment and monetary poverty status. There is, again, clear evidence of both a high level of agreement about items being necessary and consensus across groups.

TABLE 3.2: **Proportion (%) of Respondents Thinking Item is Necessary for Children, By Education and Monetary Poverty Status, UNHS 2019/20**

ITEMS FOR CHILDREN	NATIONAL	NO FORMAL EDUCATION	SECONDARY+	MONETARY POVERTY NON-POOR	MONETARY POOR
(c) A visit to a health facility when ill and all the medication prescribed to treat the illness	95	94	96	95	95
(c) Two sets of clothing	92	88	95	93	91
(c) Three meals a day	92	89	95	92	91
(c) All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, etc.	86	79	92	88	83
(c) Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	85	77	90	86	82
(c) Own blanket	82	74	87	84	79
(c) Two pairs of properly fitting shoes, including a pair of all-weather shoes	80	70	87	81	76
(c) Own bed	78	70	84	81	72
(c) Own room for children over 10 of different sexes	78	71	81	80	75
(c) Some new clothes (not second hand or handed on/down)	68	58	73	69	66
(c) Books at home suitable for their age (including reference and story books)	62	56	69	63	60
(c) Bus/taxi fare or other transport (e.g. bicycle) to get to school	62	52	69	64	57
(c) To be able to participate in school trips or events that cost money	58	48	67	60	54
(c) A desk and chair for homework for school aged children	50	41	56	54	48
(c) Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid	39	32	45	41	38
(c) Educational toys and games	38	31	45	39	36
ITEMS FOR ALL HOUSEHOLD MEMBERS	**NATIONAL**	**NO FORMAL EDUCATION**	**SECONDARY +**	**MONETARY POVERTY NON-POOR**	**MONETARY POOR**
(H) To be able to make regular savings for emergencies	91	87	94	91	91
(H) Enough money to repair a leaking roof for the main living quarters	84	79	87	84	84
(H) To be able to replace broken pots and pans for cooking	76	70	79	75	78
(H) Have your own means of transportation (e.g. car, bike, motorcycle, etc)	73	63	74	74	73
(H) Enough money to repair or replace any worn out furniture	70	61	74	71	71
(H) Enough money to repair or replace broken electrical goods, e.g. a refrigerator	53	43	61	55	52

It should be noted that a higher proportion of non-poor or respondents with a secondary or higher level of education consider a larger number of items to be necessities than respondents who are either poor or with no education. This is confirmed in the scatterplot (Figure 3.5), with most dots appearing above the 45-degree line. The associated Bland-Altman plot (Figure 3.6) shows that although there is an approximate 3% average systematic difference between the views of the monetary poor and non-poor groups. This difference in opinion is only potentially significant for two items. These are a bed for each child (own bed) and being able to replace broken pots and pans for cooking, a household-level item. The latter was the only deprivation item that a higher proportion of the monetary poor thought was a necessity compared with non-poor respondents. For almost all the child deprivations, a majority of respondents in each category considered these items necessities, confirming their importance and validity as indicators of decent living standards for Ugandans in 2019/2020.

FIGURE 3.5: **Scatterplot Showing Agreement Between Poor and Non-Poor Over Necessities for Children and Households in Uganda, UNHS 2019/20**

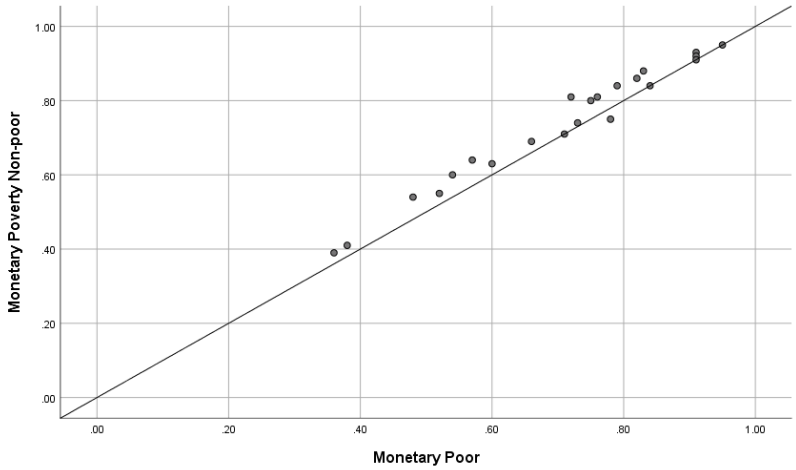


FIGURE 3.6: **Bland-Altman Plot Showing Agreement Between Poor and Non-Poor Over Necessities for Children and Households in Uganda, UNHS 2019/20**

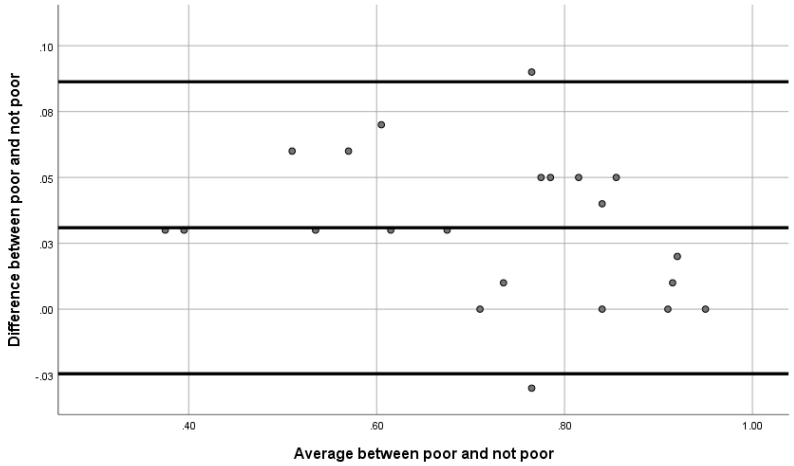


Table 3.3 presents a heatmap of the responses from urban and rural respondents and for respondents across the major geographic regions of Uganda. Once again, there is an impressive consistency in what respondents consider to be necessities for children and their households in Uganda in 2019/2020. It is notable that larger numbers of respondents in Kampala consider items to be necessities (Figure 3.7) and also that respondents in the Northern region consider a larger number of items (4) not to be necessities, which might be expected given it is the poorest region of Uganda, hosting a large number of refugees. These differences in views are large but also consistent, as the Bland-Altman plot (Figure 3.8) shows. On average, almost 20% more Kampala respondents said each child and household deprivation was a necessity compared with respondents in the Northern Region.

TABLE 3.3: **Proportion (%) of Respondents Thinking Item is Necessary for Children, By Geography, UNHS 2019/20**

ITEMS FOR CHILDREN	NATIONAL	URBAN	RURAL	KAMPALA	EASTERN	WESTERN	CENTRAL	NORTHERN
(c) A visit to a health facility when ill and all the medication prescribed to treat the illness	95	96	95	98	98	93	94	96
(c) Two sets of clothing	92	94	92	94	96	92	90	91
(c) Three meals a day	92	95	90	95	96	89	92	88
(c) All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, etc.	86	89	85	96	95	81	89	77
(c) Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	85	87	84	92	94	86	83	74
(c) Own blanket	82	86	81	92	92	87	78	67
(c) Two pairs of properly fitting shoes, including a pair of all-weather shoes	80	85	78	87	88	80	83	65
(c) Own bed	78	83	76	89	86	86	77	59
(c) Own room for children over 10 of different sexes	78	81	77	88	85	75	79	70
(c) Some new clothes (not second hand or handed on/down)	68	71	66	77	77	68	61	61
(c) Books at home suitable for their age (including reference and story books)	62	68	60	78	76	59	61	48
(c) Bus/taxi fare or other transport (e.g. bicycle) to get to school	62	68	59	79	76	56	61	50
(c) To be able to participate in school trips or events that cost money	58	63	56	71	68	58	56	46
(c) A desk and chair for homework for school aged children	50	53	49	57	61	51	48	39
(c) Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid	39	44	38	49	48	39	36	31
(c) Educational toys and games	38	43	37	52	51	38	37	23
ITEMS FOR ALL HOUSEHOLD MEMBERS	**NATIONAL**	**URBAN**	**RURAL**	**KAMPALA**	**EASTERN**	**WESTERN**	**CENTRAL**	**NORTHERN**
(H) To be able to make regular savings for emergencies	91	92	90	96	95	87	89	90
(H) Enough money to repair a leaking roof for the main living quarters	84	84	84	87	92	84	82	77
(H) To be able to replace broken pots and pans for cooking	76	76	76	78	84	76	75	66
(H) Have your own means of transportation (e.g. car, bike, motorcycle, etc)	73	73	73	80	84	69	65	72
(H) Enough money to repair or replace any worn out furniture	70	71	69	79	83	70	59	64
(H) Enough money to repair or replace broken electrical goods, e.g. a refrigerator	53	58	50	73	61	52	51	39

FIGURE 3.7: **Scatterplot Showing Agreement Between Kampala and Northern Region Over Necessities for Children and Households in Uganda, UNHS 2019/20**

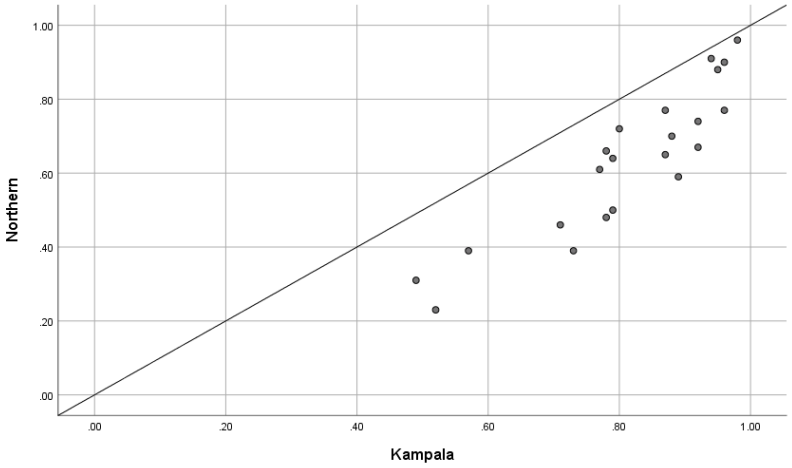
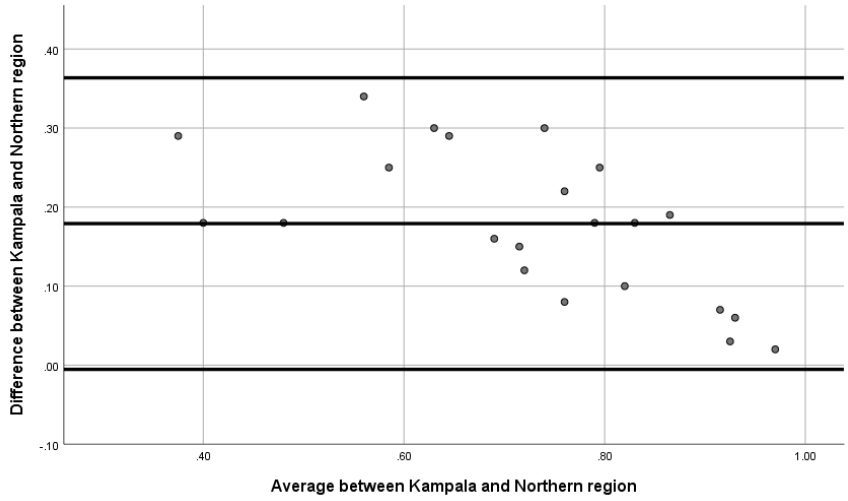


FIGURE 3.8: **Bland-Altman Plot Showing Agreement Between Kampala and Northern Region Over Necessities for Children and Households in Uganda, UNHS 2019/20**



3.2 CHANGE IN PERCEPTIONS BETWEEN 2016/17 AND 2019/20

The UNHS 2019/20 was run during the year the global COVID-19 pandemic hit. To stem the spread of the virus, governments around the world required people to remain at home, avoid going to work or school if possible and isolate when infected. These demands inevitably impacted the lives of people around the world, restricting their ability to generate an income, purchase everyday goods, and securing necessities like food and fuel. Under such conditions, it is understandable that societal priorities shifted somewhat as people re-evaluated what was necessary for survival, and thus, what otherwise might be considered necessities in 'normal' times might no longer be so under times of crisis and shock, which the pandemic certainly was. Similarly, the UNHS 2016/17 survey occurred during a period of economic shock resulting from a severe drought[13] followed by significant flooding[14]. It is with these contexts in mind that changes over time are considered at the national level in what Ugandans see as necessities. Table 3.4 sets out the proportion of respondents considering different items to be necessities in 2016/17 and 2019/20. Items are ordered by the degree of change as shown in the final column.

TABLE 3. 4: **Change in Perceptions About Children Necessities Between 2016/17 and 2019/20**

	2016/17 (%)	2019/20 (%)	CHANGE
Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid	54	39	-15
Educational toys and games	53	38	-15
To be able to participate in school trips or events that cost money	69	58	-11
Books at home suitable for their age (including reference and story books)	71	62	-9
Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	93	85	-8
Bus/taxi fare or other transport (e.g. bicycle) to get to school	68	62	-6
A desk and chair for homework for school aged children	55	50	-5
Three meals a day	96	92	-4
Own blanket	85	82	-3
Own bed	81	78	-3
A visit to a health facility when ill and all the medication prescribed to treat the illness	97	95	-2
Two sets of clothing	94	92	-2
All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, etc.	88	86	-2
Some new clothes (not second hand or handed on/down)	70	68	-2
Two pairs of properly fitting shoes, including a pair of all-weather shoes	79	80	1
Own room for children over 10 of different sexes	76	78	2

13 https://www.irinnews.org/feature/2017/03/17/drought-africa-2017

14 https://floodlist.com/africa/uganda-floods-northern-region-august-2017

ITEMS FOR ALL HOUSEHOLD MEMBERS	2016/17 (%)	2019/20 (%)	CHANGE
To be able to replace broken pots and pans for cooking	84	76	-8
Enough money to repair or replace any worn out furniture	78	70	-8
Have your own means of transportation (e.g. car, bike, motorcycle, etc)	79	73	-6
Enough money to repair or replace broken electrical goods, e.g. a refrigerator	56	53	-3
Enough money to repair a leaking roof for the main living quarters	86	84	-2
To be able to make regular savings for emergencies	92	91	-1

On average, respondents to the UNHS 2019/20 survey were 5% less likely to consider each child and household deprivation item to be a necessity (see Figure 3.10). Those items for which the largest changes (>10%) are observed relate to social and educational items. Giving presents on special occasions in 2016/17 was a majority item, with 54% of respondents considering this a necessity. In 2019/20, the proportion had fallen to 39%. There was a drop of a similar magnitude for educational toys and games for children. Figures 3.9 and 3.10 show the results from Table 3.4 as a scatterplot and a Bland-Altman plot. The average change in attitudes is clear, with a higher proportion of respondents, on average, considering each child and household deprivation item to be a necessity in 2016/17 – during the time of drought and flooding in Uganda – than in 2019/20.

FIGURE 3.9: **Scatterplot of Changes in Attitudes to Necessities, 2016/17 and 2019/20**

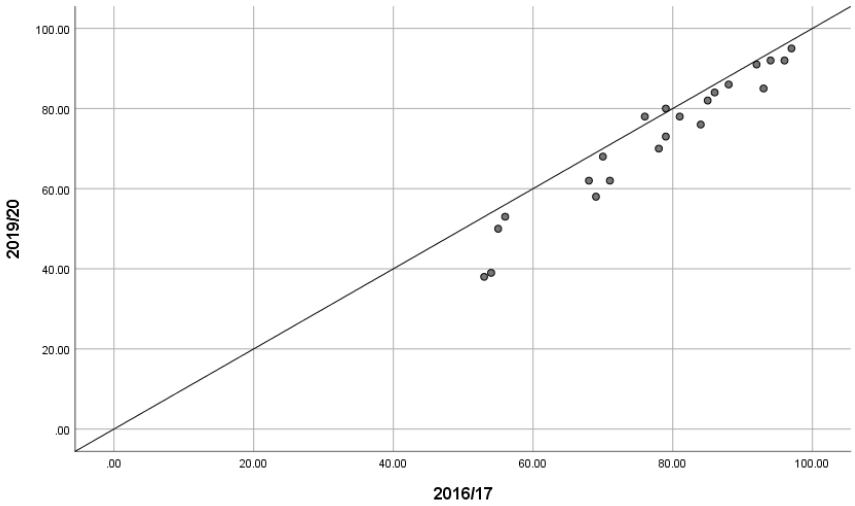
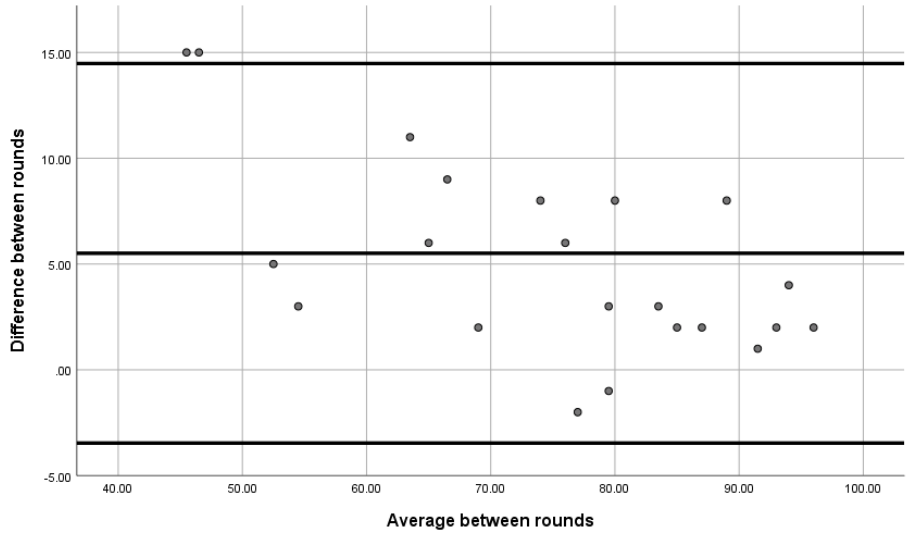


FIGURE 3.10: **Bland-Altman Plot Showing Agreement Between Respondents in UNHS 2016/17 and UNHS 2019/20**



ON AVERAGE

5%

respondents to the UNHS 2019/20 survey were were less likely to consider each child and household deprivation item to be a necessity

The proportion of respondents that considered giving presents on special occasions a necessity **had fallen to**

39%

from 54% in 2016/17

On average a **higher proportion** of respondents considered **each child and household deprivation item to be a necessity in 2016/17** – during the time of drought and flooding in Uganda – than in 2019/20.

This result implies that major economic shocks unsurprisingly influence public attitudes about what are the necessities for children in Uganda. It is therefore important to examine the effects of the COVID-19 pandemic on public perceptions about what children need. Figures 3.11 and 3.12 show that the pandemic resulted in a remarkably rapid change in public opinion, with higher proportions of respondents (+6% on average) believing that all child and household deprivation items were necessities.

FIGURE 3.11: **Change in Attitudes About Necessities in 2019/20 (Before and During Covid-19)**

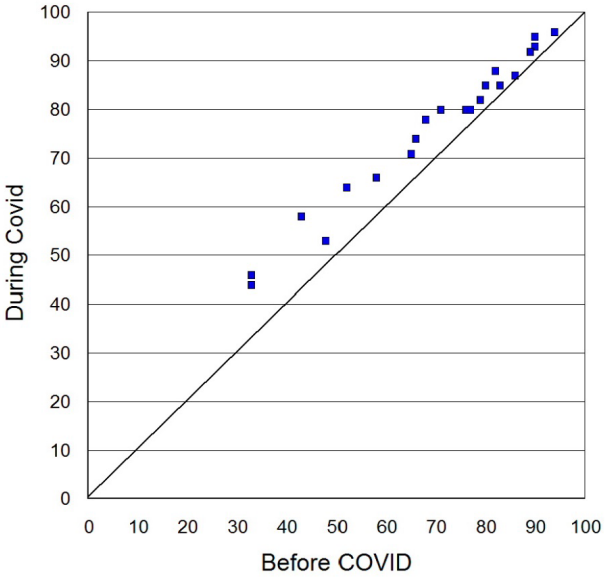
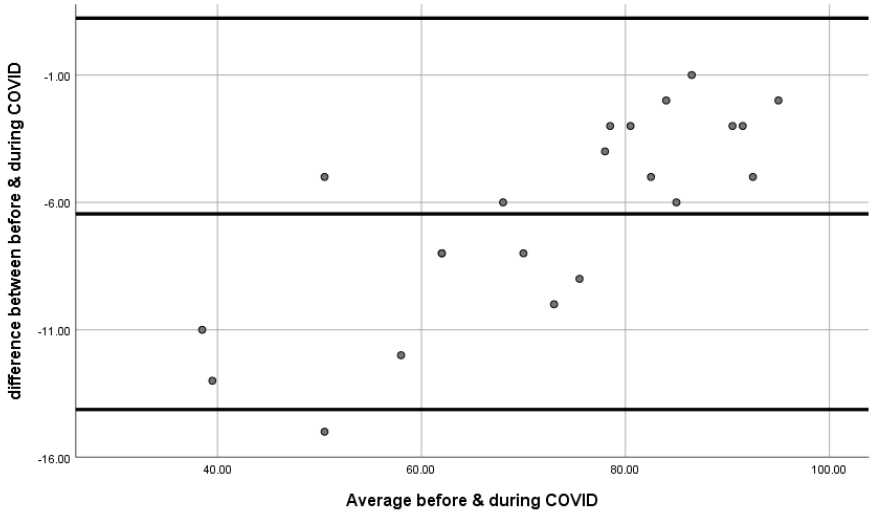


FIGURE 3.12: **Bland-Altman Plot Showing Agreement Between Respondents (Before and During Covid-19)**



More respondents believed that educational and school-related deprivation items were necessities, as well as being able to buy their children a present. This is unsurprising given that schools were closed by the Government between March and October 2020 to successfully slow the progress of the pandemic. Therefore, children needed to be educated and fed at home – hence the increased support for replacing broken cooking pots and pans. Public transport was also suspended for three months, between March and June, as part of the COVID-19 restrictions, hence the increased support for the need for a household to have its own means of transport.

Figure 3.11 and Table 3.5 (below) show that the largest increase in attitudes **(a 10% or more increase in support)** was for:

15%
A desk and chair for homework for school aged children

13%
Presents for children once a year on special occasions, e.g., birthdays, Christmas, Eid

12%
To be able to participate in school trips or events that cost money

10%
Educational toys and games

10%
To be able to replace broken pots and pans for cooking

10%
Have your own means of transportation (e.g., car, bike, motorcycle, etc)

TABLE 3.5: **Change in Attitudes About Children Necessities Between 2016/17, Before and During Covid-19**

DEPRIVATION	2016/17 (%)	BEFORE COVID 2019/20 (%)	DURING COVID 2020 %
Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid	54	33	46
Educational toys and games	53	34	44
To be able to participate in school trips or events that cost money	69	52	64
Books at home suitable for their age (including reference and story books)	71	58	66
Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	93	82	88
Bus/taxi fare or other transport (e.g. bicycle) to get to school	68	58	66
A desk and chair for homework for school aged children	55	43	58
Three meals a day	96	90	93
Own blanket	85	80	85
Own bed	81	77	80
A visit to a health facility when ill and all the medication prescribed to treat the illness	97	94	96
Two sets of clothing	94	90	95
All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, etc.	88	86	87
Some new clothes (not second hand or handed on/down)	70	65	71
Two pairs of properly fitting shoes, including a pair of all-weather shoes	79	79	82
Own room for children over 10 of different sexes	76	76	80
Items for all household members			
To be able to replace broken pots and pans for cooking	84	71	81
Enough money to repair or replace any worn out furniture	78	66	74
Have your own means of transportation (e.g. car, bike, motorcycle, etc)	79	68	78
Enough money to repair or replace broken electrical goods, e.g. a refrigerator	56	48	53
Enough money to repair a leaking roof for the main living quarters	86	83	85
To be able to make regular savings for emergencies	92	89	92

FIGURE 3.13: **Perception of Necessities in 2016/17 and 2019/20 (Before and During Covid-19)**

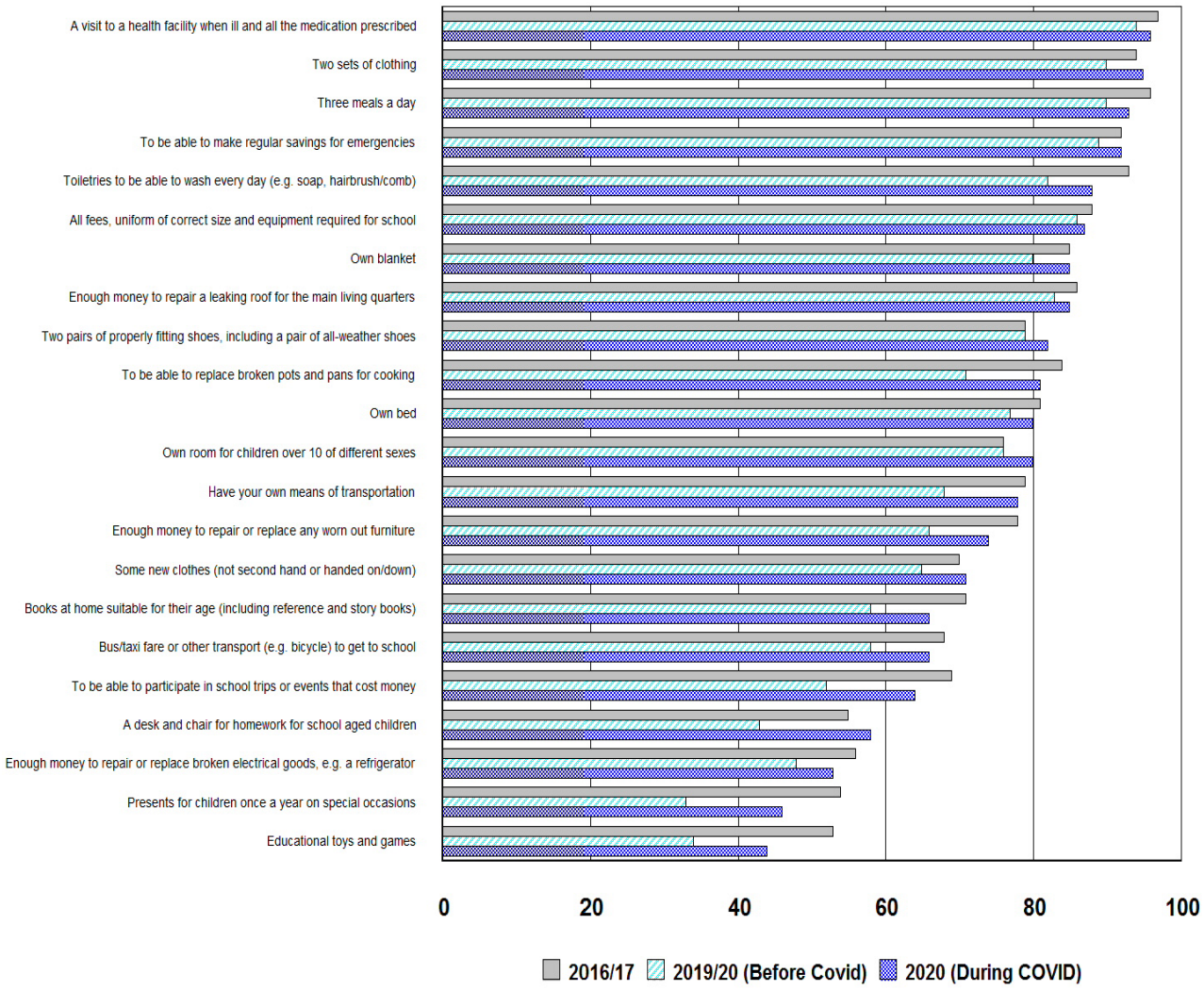


Figure 3.13 clearly shows that, during times of economic and social crisis, such as during the drought and floods in 2016/17 and the COVID-19 pandemic, the public in Uganda are more likely to perceive more child and household deprivation items to be necessities than during relatively prosperous times – such as in 2019/20, immediately prior to the pandemic.

3.3 CONCLUSION

Overall, the heatmaps, scatter and Bland-Altman plots presented here all point to a robustness of the approach for assessing multidimensional poverty in Uganda. Even under conditions of major stress, most Ugandans still held firm that most of the items asked in the UNHS 2019/20 were necessities for children and their families, which no one should have to go without due to a lack of resources. The validity and reliability of the final deprivation index used to assess multidimensional poverty among Uganda's children in the face of a global pandemic, which effectively shut nations down shows Uganda to be at the forefront of poverty research informing progress towards the SDGs. How children and their families fared in 2019/20 is the subject of the next chapter.

CHAPTER 4

CHILD POVERTY IN UGANDA

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As discussed in the previous chapters, child poverty can be measured in several ways. This report focuses mainly on multidimensional (MD) poverty among Uganda's children and also compares these results with the official monetary poverty measure. This report provides information about the extent of deprivation (i.e., an enforced lack due to not being able to afford them) of important socially perceived necessities (SPNs) for children.

4.1 DESCRIPTIVE ANALYSIS OF CHILD DEPRIVATIONS IN UNHS 2016/17 AND 2019/20

TABLE 4.1: **Child Deprivations in Uganda, UNHS 2016/17 and UNHS 2019/20**

CHILD DEPRIVATIONS	2016/17 % DON'T HAVE, CAN'T AFFORD	2019/20 % DON'T HAVE, CAN'T AFFORD
Presents for children once a year on special occasions	70	71
Educational toys and games	74	69
Books at home for their age	71	68
Bus/taxi fare or other transport	62	66
A desk and chair for homework	69	65
Own bed	74	64
Two pairs of properly fitting shoes	71	60
Own blanket	66	59
To be able to participate in school trips	58	59
Some new clothes	63	52
Own room for children over 10 of different sexes	36	44
Three meals a day	48	42
All fees, uniforms of correct size and equipment	52	42
A visit to the health facility when ill and all prescribed medication	33	31
Toiletries to be able to wash everyday	29	29
Two sets of clothing	17	11
Some fashionable clothes for secondary school children	15	
Own cell phone for secondary school children	13	

Source: Ugandan National Household Survey 2019/20 (N= 35,190 children) and Ugandan National Household Survey 2016/17 (N= 41,088 children).

Table 4.1 shows the percent of Ugandan children in both 2019/20 and 2016/17 suffering different child deprivations because their parents or guardians cannot afford them, rather than because they do not want the children to have them or for some other reason. Thus, about seven out of every ten (71%) children in Uganda received no presents on their birthday or at Christmas (or other special occasions) during 2019/20 due to a lack of money. Table 4.1 shows very high rates of child deprivation in Uganda in both 2019/20 and 2016/17. However, the good news is that there has been some improvement for some (but not all) child deprivations – with rates of deprivation falling slightly between 2016/17 and 2019/20. For example, in 2019/20, 64% of children did not have their own bed to sleep compared with 74% of children in 2016/17. It is particularly concerning that 95% of adults believe that children should have three meals a day, but two out of every five children in Uganda (42%) in 2019/20 did not have three meals a day due to a lack of money. This is an improvement compared with 2016/17, but the number of children who are food deprived in Uganda is still extremely high.

In 1974, at the first World Food Conference in Rome, Henry Kissinger made the following commitment:

"within a decade no child will go to bed hungry, [...] no family will fear for its next days bread and [...] no human being's future and well being will be stunted by malnutrition".

Unfortunately, millions of children in Uganda still go to bed hungry and poor families struggle to feed their children. Focus Group[15] participants in Moroto in 2017[16], explained their situation:

> **MOROTO #45** *P8 There is hunger here in the community. People are facing hunger in this community since there is no food to eat.*

> **%MOROTO #46** *P2 There is no way to feed the children, so they are going to die. I plead to the government to help children.*

15 See the Focus Groups report for details (Fahmy and Oloya, 2018)

16 Moroto had suffered from drought during 2015 and 2016 (Nakalembe, 2018).

> **%MOROTO #46** *P6 When we feel hungry, we go to the bush to look for small bush fruits of which we cannot go with children and the few fruits we bring for the children is not enough for them so children are bound to die.*

> **%MOROTO #48** *P3 Right now, we are very poor and we cannot feed the family, there is no food to eat and if you want to feed the family, you have to go along the river to look for green leaves to use as food.*

The rates of deprivation shown in Table 4.1 are age appropriate, i.e., not all deprivation measures are applicable to all children. For example, babies are not deprived if they do not go to school. The age ranges for the different deprivation rate calculations are:

- Age 11-17 for bedrooms for every child of different sex
- Age 6-17 for a desk and chair for homework, going on a school trip. Bus/taxi fare, school fees and uniforms
- Age 3-17 for books suitable for age
- Age 3-12 for educational toys and games
- Age 0-17 for all other child items.

TABLE 4.2: **Children Suffering from Household Deprivations in Uganda 2019/20 and 2016/17**

HOUSEHOLD DEPRIVATIONS	2019/20 % DON'T HAVE, CAN'T AFFORD	2016/17 % DON'T HAVE, CAN'T AFFORD
Have your own means of transportation	62	67
Enough money to repair or replace any worn out furniture	66	56
To be able to make regular savings for emergencies	59	49
Enough money to repair a leaking roof for main living quarters	44	42
To be able to replace broken pots and pans for cooking	41	42
Enough money to repair or replace broken electrical goods	66	37

Source: Ugandan National Household Survey (N=13,706 household respondents)

Table 4.2 (above) shows children who are deprived of a range of household-level items which affect their well-being. For example, 91% of respondents believe it is essential to '*to make regular savings for emergencies*', i.e., to put some money aside just in case. However, almost half (49%) of children in Uganda lived in a household in 2019/20 which could not afford to put some money aside for emergencies. This is an improvement on the situation in 2016/17, when 59% of children lived in households without regular emergency savings. Not everything has improved, as 76% of household respondents believed that being able to replace broken pots and pans for cooking was essential, yet two out of five children (42%) lived in households which could not afford to do this in 2019/20. There has been no improvement in the percent of children suffering for this deprivation since 2016/17.

The following results in this chapter begin with an examination of monetary and multidimensional (MD) poverty among children and shows how they are distributed by geographic (i.e., region and place of residence) and demographic (age, sex, household composition, orphan status) variables commonly used when reporting the prevalence (Prev., in %) or distribution (Distr., %) of poverty. To fully understand the distribution of child poverty in Uganda, it is important to use prevalence rates and how poverty is distributed across society – if only to say that this group includes the highest rates of child poverty and the largest number of poor children. Results are then presented with regards to children's Constitutional rights to services and social protection (education, health, work, crime and birth registration and then for children's other Constitutional economic and social rights, including food security, shelter, water and sanitation, clothing, and access to information.

4.2 MONETARY AND MULTIDIMENSIONAL POVERTY AMONG CHILDREN

The 2016/17 Uganda National Household Survey (UNHS 2017) used an innovative method for assessing MD poverty among children and adults – the Consensual Approach. This approach allows the development of child-specific, age-appropriate measures of MD poverty based on a population-derived national definition of poverty, which is a requirement of the United Nations' SDGs. The Government aims to reduce the MD poverty of men, women and children by half between 2015 and 2030. Thus, the 2016/17 results can be regarded as a base line for this important SDG target, and this report on the 2019/20 UNHS survey shows the progress that has been made in reducing the multidimensional poverty of children in Uganda.

Two measures of child poverty are used in this chapter. The first is **Multidimensional Child Poverty (MDCP)**, i.e., children living in households whose equivalent household expenditures are less than 152,065 Ugandan Shillings per month and who also suffer from 7 or more deprivations[17] (see Appendix 1 for details). The second is **Monetary Child Poverty** - the proportion of children living in households with income below the national poverty line.

4.2.1 Overall Multidimensional and Monetary Child Poverty

Based on the UBOS household expenditure poverty measure, slightly fewer than a quarter of children in Uganda (23%) were monetary 'poor' in 2019/20 - an identical child monetary poverty rate to 2016/17. There has been no reduction in the monetary poverty rate among children in Uganda. Between 2106/17 and 2019/20, the monetary poverty rate for adults fell slightly, but there was no improvement for children. There were few differences by gender or age group, but there were higher poverty rates for households where there were three or more children. Rates were highest for lone parents with three or more children (57%), but this was driven more by the number of children rather than lone parent status. Children identified as orphans (using UNICEF's criteria of one or both parents deceased) had slightly higher rates of poverty (26%) compared with the national average. Surprisingly, children living only with their father or with neither parent had a lower risk of monetary poverty than children living with both of their parents or only with their mothers.

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23%
of children in Uganda **were monetary 'poor'** in both 2016/17 and 2019/20

44%
of children in Uganda Multidimensional poor in 2019/20

57%
Rates were highest for **lone parents with three or more children**

85%
of Uganda's monetary poor children live in rural areas

MORE THAN
1 IN 7
poor children live in Busoga sub-region

Around 4X more children
are identified as **MD poor (8%)** as compared with **monetary poverty (2%)** in Kampala

Areas most severely affected by the long years of conflict (Northern and North-Eastern regions) have the highest poverty rates

MONETARY	*MULTI-DIMENSIONAL*
58%	**71%**

17 In 2016/17, the multidimensional poverty line for adults and children was defined as an equivalised household expenditure of less than 141,771 Ugandan Shillings and experiencing 6 or more deprivations

TABLE 4.3: **Multidimensional and Monetary Child Poverty in Uganda in 2016/17 and 2019/20**

		2019/20		2016/17	
		MULTIDIMENSIONAL POVERTY %	MONETARY POVERTY %	MULTIDIMENSIONAL POVERTY %	MONETARY POVERTY %
UGANDA	**NATIONAL ESTIMATE**	**44**	**23**	**56**	**23**
Sex	Male	45	24	57	24
	Female	44	22	56	23
Age Group	0-5	37	22	54	23
	6-8	48	24	60	25
	9-14	49	24	58	24
	15-18	46	21	54	21
Household Type	1 adult, 1 child	30	9	29	6
	1 adult, 2 children	39	11	48	11
	1 adult, 3+ children	57	27	65	29
	2 adults, 1 child	26	12	35	12
	2 adults, 2 children	32	15	47	14
	2 adults, 3+ children	48	26	62	27
	3+ adults, 1 child	31	15	34	9
	3+ adults, 2 children	32	13	38	11
	3+ adults, 3+ children	43	22	54	23
Orphan Status	No	43	22	56	23
	Yes	54	26	63	26
Child's Living Arrangements	Living with both parents	43	24	NA	NA
	Living with mother only	51	24	NA	NA
	Living with father only	41	19	NA	NA
	Living with neither parent	44	19	NA	NA

The MD poverty results for children present a contrasting picture to the monetary poverty results, with a significant minority of children (44%) suffering from MD poverty across the country. However, despite these high poverty rates, MD child poverty has fallen as, in 2016/17, a majority of children in Uganda (56%) were multidimensionally poor.

It should be noted that the current Ugandan national poverty line was set in 1998 (using 1993 data) using a modified version of the World Bank's method (Ravallion and Bidani, 1994). It is, therefore, unlikely to reflect the 21st Century realities in which poor Ugandan households live. The Ugandan national poverty line is significantly lower than the World Bank's $1.90 PPP per capita poverty line. For example, nearly 42% of adults and children were poor in 2016, using the $1.90 poverty line, compared with 21% using the UBoS Basic Needs poverty line (World Bank, 2020).

When examining the distribution of MD poverty, similar patterns can be observed to that of monetary poverty, with rates of MD poverty reaching 57% for some households with three or more children. This highlights the need to ensure additional support and social protection for households with larger numbers of children and also for orphans.

TABLE 4.4: **The Geography of Child Poverty in Uganda in 2016/17 and 2019/20**

		2019/20		2016/17	
		MULTIDIMENSIONAL POVERTY %	MONETARY POVERTY %	MULTIDIMENSIONAL POVERTY %	MONETARY POVERTY %
UGANDA	**NATIONAL ESTIMATE**	**44**	**23**	**56**	**23**
Place of residence	Rural	50	26	63	27
	Urban	27	14	32	10
Sub-Region	Kampala	8	2	15	3
	Buganda South	20	8	34	10
	Elgon	30	15	80	37
	Bunyoro	30	11	51	19
	Toro	39	14	48	12
	Ankole	40	14	37	7
	Buganda North	41	16	45	11
	West Nile	41	19	81	39
	Busoga	51	33	75	40
	Lango	53	26	47	16
	Kigezi	56	30	57	12
	Teso	66	24	58	27
	Bukedi	68	37	83	46
	Karamoja	77	68	84	60
	Acholi	84	72	76	35
PRDP areas (conflict affected)	Severely affected	71	58	NA	NA
	Sporadically affected	46	21	NA	NA
	Spill overs	53	25	NA	NA
	Rest of Uganda	38	18	NA	NA

FIGURE 4.1: **Multidimensional Child Poverty in by Sub-Region in 2016/17 and 2019/20**

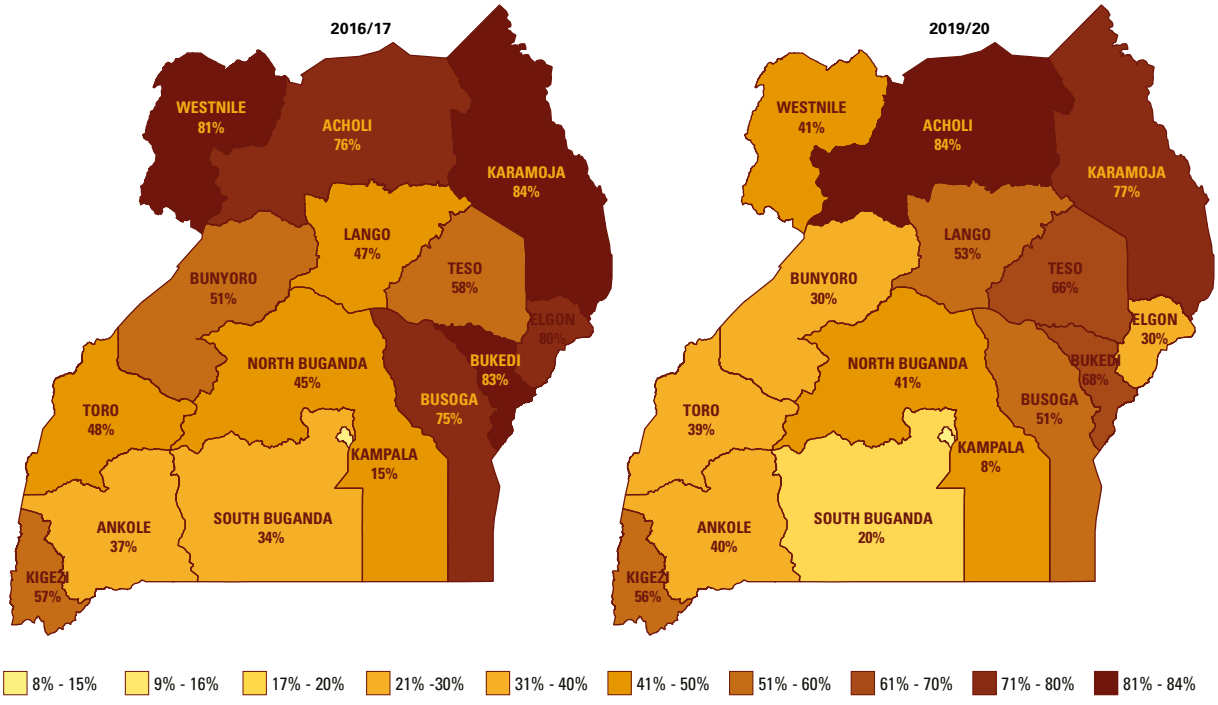
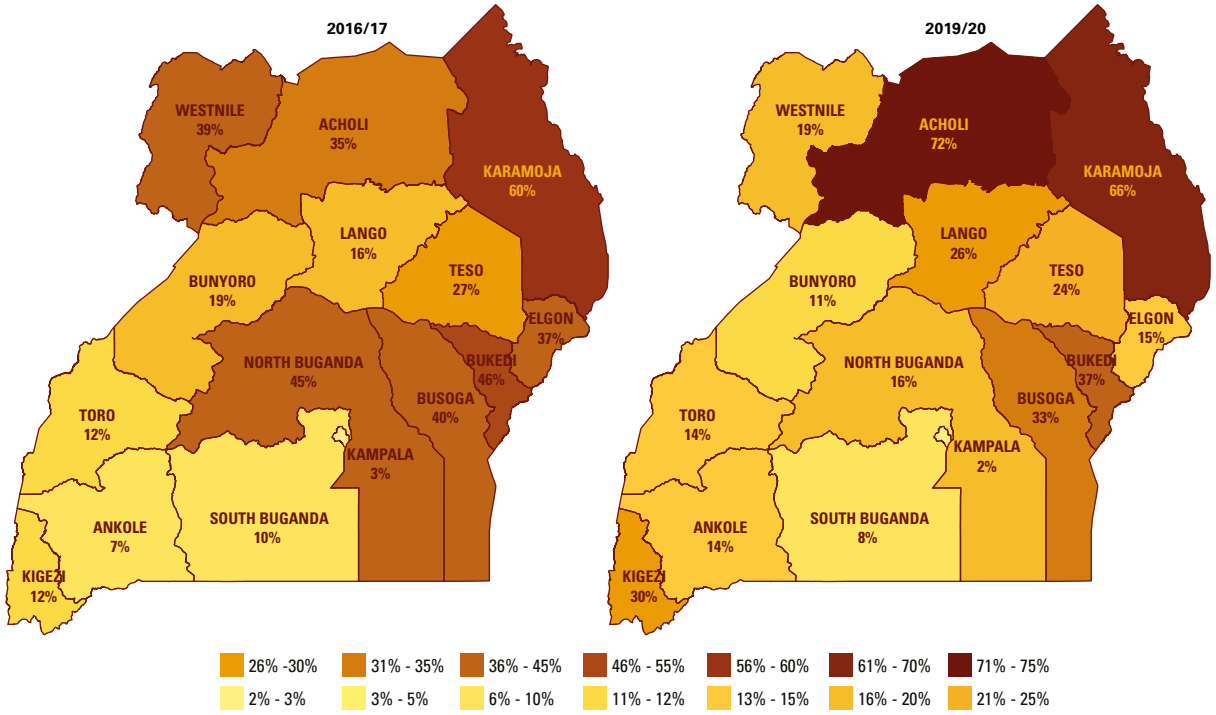


FIGURE 4.2: **Monetary Child Poverty by Sub-Region in 2016/17 and 2019/20**



Child Poverty (monetary and MD) in Uganda is clearly distributed differentially by geography. Children in urban areas have almost half (14%) the national rate of monetary poverty (23%) compared with their rural peers, where rates are higher (26%). The lowest rates of monetary child poverty are found in Kampala (2%), and seven sub-regions have monetary poverty rates above the national average: Acholi (72%), Karamoja (68%), Bukedi (37%), Busoga (33%), Kigezi (30%), Lango (26%) and Teso (24%). Eighty-five percent of Uganda's monetary poor children live in rural areas, and more than one in every seven poor children live in Busoga.

When MD poverty is considered, the disparity between urban and rural areas is similar – 27% and 50%, respectively. In Kampala, around four times more children are identified as MD poor (8%) as compared with monetary poverty (2%). The same seven regions above the national average for monetary poverty are also above the national average for MD child poverty.

The Northern and North-Eastern regions of Uganda suffered from conflict for almost 20 years (from 1986 to 2007). The Peace Recovery and Development Plan (PRDP) has been implemented in 55 districts and 9 municipalities in the North of Uganda. The PRDP assistance includes areas which were either severely or sporadically affected by conflict, as well as those that experienced conflict spill over affects from the conflict (OPM 2011). Table 4.4 (above) shows that, unsurprisingly, the areas most severely affected by the long years of conflict have the highest monetary (58%) and MD (71%) child poverty rates. The areas in which the populations were sporadically affected or suffered from spill over effects of the conflict have intermediate MD and monetary child poverty rates. By contrast, the areas of Uganda which suffered few effects of the conflict have the lowest child poverty rates. Peace and security are prerequisites for eradicating child poverty and violent conflict and war have long lasting harmful effects.

The geography of child poverty at sub-national level in Uganda is discussed in much greater detail in Chapter 6.

4.2.2 Education Deprivation Among Children

Article XVIII of the Ugandan Constitution requires the State to promote free and compulsory basic education and to take appropriate measures to afford every citizen an equal opportunity to attain the highest educational standard possible. These are ambitious goals and, if met, would enable Uganda to harness the full potential of its citizens in driving national economic, social and cultural development.

To reflect whether children's rights to education are being fulfilled, two different approaches are used. The first uses three indicators, reflecting varying degrees of educational deprivation among school-aged children (aged 6 to 18 years):

1. Children not currently in school or who have not completed primary education are classed as 'MDG Education deprived[18]';
2. School age children who have never attended school are classed as 'Severe Education deprived'; and
3. School age children unable to read or write, are classed as 'Illiterate'.

The second approach shows the proportion of children who either lack education-related deprivation items or are unable to participate in education-related activities *because their households cannot afford them*, i.e., an *enforced* lack due to poverty. This refers to educational items that over half of all Ugandans consider to be necessities which all children should have.

The measures of education 'poverty' selected are indicative of varying levels of deprivation. The MDG measure reflects a level of deprivation whereby children have been able to get to school and receive an education, but they have either not had a complete primary education (if they are of secondary school age) or are of primary school age but are not currently attending school. This measure is less severe than the second, which identifies children who have never been to school. This more severe measure has been used for many years by UNICEF to reflect severe education poverty (Gordon et al, 2003; Minujin and Nandy, 2012; UNICEF 2007[19]) in the developing world.

At the national level, around one in ten children (10%) are MDG education deprived, one in twenty (5%) are severely education deprived, and four in ten (41%) are unable to read or write (illiterate). There was a small improvement in all these indicators of education deprivation between 2016/17 and 2019/20.

Table 4.5 shows that, across each measure of education deprivation, MD poor children are more likely (between two and four times) to be education deprived compared with non-poor children. Half of all multidimensionally poor children are unable to read or write, accounting for 74% of all illiteracy amongst children in Uganda. Rates of MDG education deprivation and severe deprivation are low among not poor children (6% and 3%, respectively), but a third of non-poor children are unable to read or write, implying there may be problems with the quality of education that all children in Uganda are receiving. Poorer children may be receiving an even lower quality of education.

EDUCATION DEPRIVATION IS VERY HIGH IN UGANDA.

1 IN 10
children are MDG education deprived

1 IN 20
children are severely education deprived

4 IN 10
children are unable to read or write (illiterate)

1 IN 3
of non-poor children are unable to read or write

9 IN 10
of children are deprived of one or more of the 5 education deprivations

7 IN 10
children lacked books in their homes

ALMOST **2 THIRDS**
could not participate in school trips, which required money

7 IN 10
children lacked a chair or desk to do their homework

18 This was an indicator for the UN Millennium Development Goal Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

19 UNICEF 2007 is the Global Study of Child Poverty and Disparities handbook, available at: www.unicef.org/socialpolicy/index_45357.html

TABLE 4.5: **Education Child Poverty in Uganda in 2019/20**

		MDG EDUCATION DEPRIVED %	SEVERE EDUCATION DEPRIVED %	UNABLE TO READ OR WRITE %
UGANDA	**NATIONAL ESTIMATE**	**10**	**5**	**41**
MD Child Poverty	Poor	15	8	50
	Not Poor	6	3	33
Monetary Child Poverty	Poor	20	12	57
	Not Poor	8	4	36

Poverty is known to result in lower educational attainment both in Uganda and across the world. Any teacher will tell you that it is very difficult to teach a hungry child. Focus group participants in 2017 in Homia, Kampala and Mbarara eloquently explained:

> **%HOIMA #10** *RM: Hunger affects children's concentration in class, if a teacher asks if they have understood, the child will respond with a Yes because he/she cannot say No and in the mind the child will be just thinking about food hence low concentration.*

> **%KAMPALA #24** *RM: [Children] go to school on empty stomachs making it hard for them to grasp what is being taught in class. I don't think that a child who goes to school in the morning minus taking breakfast can grasp what they are teaching.*

> **%MBARARA #40** *RF: You find a child who is capable in school but because the meal of the previous evening was not enough, then she goes to school in the morning without breakfast so when the teacher is teaching, the pupil's mind is wondering about what they will eat when they get back home. [...] There is nothing to eat at home. So, all the time when one is supposed to be concentrating in class, their minds are at home wondering what they will eat.*

Hunger and inadequate diets weaken children's immune systems and make them susceptible to both diet-related diseases and a wide range of infectious diseases – particularly when they live in overcrowded households. When children are repeatedly sick, they may miss school and, even if they attend, they may have difficulty in concentrating on their lessons. Focus group participants in 2017 in Iganga and Soroti highlighted these problems as a cause of educational inequalities:

> **%IGANGA #13** *F R; They take so long to attain 1st position in class because they come late, miss many lessons, they are always in and out of school, they are always sickly, they don't feed well, yet rich people's children feed well.*

> **%SOROTI #56** *P2 They miss a well-balanced diet in their homes. The parents may not have money to buy meat and every day you are eating only one type food which exposes the children to diseases like kwashiorkor.*

Deprivation of Socially Perceived Educational Necessities

Respondents to the 2019/20 UNHS were asked whether they considered a set of items and activities were essential for all children in Uganda. Some items relate to the educational needs of children, such as having books at home suitable for their ages, being able to have the correct (fitting) school uniform and equipment, etc. For all these items, over 50% of respondents considered them to be essential for children and so they can all be considered to be 'socially perceived necessities' (SPNs) pertaining to education. Table 4.6 shows how deprivation of these SPNs is distributed across Ugandan society. The results are for school-age children (i.e., aged 6 to 18 years).

Deprivation rates for each of the five education deprivations were high across Uganda, with almost nine out of 10 children deprived of one or more (see last column in Table 4.6). Even for basic items like a school uniform and equipment, almost half of school age children were deprived due to a lack of money. Seven out of ten children lacked books in their homes, almost two-thirds could not participate in school trips, which required money, and seven out of ten lacked a chair or desk to do their homework. Education deprivation is very high in Uganda. However, there was a slight improvement between 2016/17 and 2019/20. Focus Group participants in 2017 in Hoima, MBarara and Hoima explained some of the difficulties that poor children face at school:

%MPIGI #53 *P5 There are no scholastic materials for school going children. We lack books, pens, due to poverty in parents.*

%HOIMA #07 *RF: A child may fail to attend school party because of not having a nice dress for a party.*
RM: A child may fail to associate with others because of not having soap to clean themselves.

%HOIMA #10 *RF: Children with torn uniform may feel ashamed to mix well with his/her colleagues.*

%MBARARA #40 *RM: If I go to school with a torn uniform, I will fear to enter class and join the other students, when they are all smart and yet me I have a torn uniform. I will stay outside class. I may miss school because other students have packed food, yet some schools do not allow commuting home for lunch. When one is from a poor family, maybe you cannot afford to pack food. These end up demoralizing me and I fail to continue in education hence poverty.*

TABLE 4.6: **Education Deprivations in Uganda in 2019/20**

		BOOKS AT HOME SUITABLE FOR THEIR AGE %	ALL FEES, UNIFORM & EQUIPMENT REQUIRED FOR SCHOOL %	SCHOOL TRIPS OR EVENTS THAT COST MONEY %	A DESK AND CHAIR FOR HOMEWORK %	BUS/TAXI FARE OR OTHER TRANSPORT TO GET TO SCHOOL %	EDUCATION DEPRIVATION %
UGANDA	**NATIONAL ESTIMATE**	**69**	**45**	**64**	**69**	**70**	**88**
Sex	Male	70	45	64	69	70	89
	Female	69	44	63	68	70	88
Age Group	0-5	-	-	-	-	-	-
	6-8	70	45	64	69	71	89
	9-14	70	45	65	70	71	89
	15-18	66	43	60	66	68	86
Number of children in the Household	1	60	37	55	55	61	81
	2	64	38	58	61	66	83
	3	68	43	63	66	69	87
	4	71	45	63	68	71	89
	5+	72	48	67	75	73	91
Orphan	No	69	44	63	68	70	88
	Yes	74	50	70	71	72	90
Place of Residence	Rural	74	49	68	72	73	91
	Urban	56	32	52	59	60	80
PRDP areas (conflict-affected)	Severely affected	67	60	67	72	69	88
	Sporadically affected	68	43	60	73	59	87
	Spill overs	76	49	67	77	79	94
	Rest of Uganda	68	42	63	65	71	88

Education deprivation rates were much higher in rural areas. In the PRDP conflict-affected areas, the highest rates of education deprivation are in the districts which were affected by spill over effects. The most severely affected conflict areas had similar rates of education deprivation to Uganda as a whole.

Younger school-age children suffer from slightly higher rates of education deprivation than teenage children in the oldest age group (15-18). However, there is little difference by gender – with boys and girls suffering from similarly high levels of education deprivation, which shows the extent to which most Ugandan children are missing out from developing the skills they need to fully participate in a knowledge economy.

There is a clear gradient of increasing education deprivation with the number of children in the household – the more children, the more deprived.

TABLE 4.7: **Education Deprivation by Poverty Status in Uganda in 2019/20**

		BOOKS AT HOME SUITABLE FOR THEIR AGE %	ALL FEES, UNIFORMS & EQUIPMENT REQUIRED FOR SCHOOL %	SCHOOL TRIPS OR EVENTS THAT COST MONEY %	A DESK AND CHAIR FOR HOMEWORK %	BUS/TAXI FARE OR OTHER TRANSPORT TO GET TO SCHOOL %	EDUCATION DEPRIVATION %
UGANDA	**NATIONAL ESTIMATE**	**69**	**45**	**64**	**69**	**70**	**88**
MD Child Poverty	Poor	89	69	85	87	85	99
	Not Poor	51	22	44	52	56	78
Monetary Child Poverty	Poor	83	70	83	83	84	97
	Not Poor	65	37	58	65	66	86

Differences in deprivation rates are more pronounced when the poor and not poor are compared. Almost 90% of MD poor children lack books at home suitable for their age, almost 70% cannot afford school uniforms and equipment, and 85% cannot afford to participate in school trips requiring payment. Similarly, almost 90% do not have a desk and chair for their homework. The links between poverty and educational attainment are clear, with poor children unable to take full advantage of school, resulting in a low attainment, which limits their options for employment, earnings and scope for escaping poverty. While school enrolment rates may be high, the lack of access to educational SPNs may explain the high rates of illiteracy.

Child hunger and malnutrition is unfortunately widespread in Uganda, resulting in poor child health and many children failing to attain their educational potential. Investing in making primary and secondary schooling free may not be sufficient on its own to rapidly improve the education of all children in Uganda. School meals/feeding programmes are likely to be both a necessary and essential component for improving education outcomes for all.

In addition, a lack of money also results in poor children not having the equipment and resources they need to participate in school on equal terms with their richer peers and fulfil their educational potential. One focus group participant in Kampala in 2017 explained succinctly:

> **%KAMPALA #20** *RF1: Being poor denies children their right to education and also affects their growth and development.*

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4.2.3 Health Deprivation Among Children

Article XX of the Uganda Constitution declares that:

"The State shall take all practical measures to ensure the provision of basic medical services to the population."

This echoes Article XXIV of the UNCRC, which makes clear all children have:

"the right ... to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services."

Three indicators of health deprivation are used:

1. The first is a measure of more extreme health deprivation, whereby a child was reported as having had an illness which limited their activities for one or more days but for whom no treatment was sought or provided. This indicator is for children aged under five years old and measures young children who suffer from diarrhoea or difficulty with breathing.
2. The second indicator is a health-related SPN and reflects whether parents/carers reported that they could not afford to either take a sick child to a health facility and/or get all prescribed medications when the child was ill. Of all adults, 95% believed that this was essential and everyone should be able to afford to do this. These indicators reflect both the experience of illness and an enforced lack of access to health care and are thus an infringement of children's constitutional right to health and access to medical services.
3. The third indicator concerns children who do not have sufficient toiletries to be able to wash every day. Washing is important for children to be able to stay clean and healthy and to avoid a COVID-19 infection during the pandemic.

TABLE 4.8: **Child Health Poverty in Uganda in 2019/20**

		UNTREATED MAJOR ILLNESS IN PAST 30 DAYS %	UNABLE TO AFFORD A VISIT TO A HEALTH FACILITY WHEN ILL AND BUY ALL THE MEDICATION PRESCRIBED TO TREAT THE ILLNESS %	LACK OF TOILETRIES TO BE ABLE TO WASH EVERYDAY %
UGANDA	**NATIONAL ESTIMATE**	**2**	**31**	**29**
MD Child Poverty	Poor	3	51	48
	Not Poor	2	14	14
Monetary Child Poverty	Poor	3	51	46
	Not Poor	2	25	24

Table 4.8 (above) shows the impacts of poverty on children's health deprivation. It is clear the poor are worse off in terms of untreated illness. Parents were asked if they could afford to take their children to a health facility when they were ill and buy the medication prescribed to treat the illness. The results show that over half of MD poor and monetary poor children did not receive the healthcare they needed. Similarly, almost half of poor children lacked the toiletries they needed to keep themselves clean (and healthy) every day. Poor children were more than twice as likely to not be able to afford medical care and medicines they need and not have toiletries than non-poor children. Fortunately, only 2% of children aged under five in Uganda in 2019/20 had had a major illness (i.e. diarrhoea or difficulty with breathing) during the past 30 days, which was untreated.

OVER **50%**

of poor children lacked the toiletries they needed to keep themselves clean (and healthy) every day

Poor children were MORE THAN **twice**

as likely to not be able to afford medical care and medicines they need and not have toiletries than non-poor children.

ONLY **2%**

of children aged under five in Uganda in 2019/20 had had a major illness

TABLE 4.9: **Child Health Deprivations by Socio-Economic Characteristics in Uganda in 2019/20**

		UNABLE TO AFFORD A VISIT TO A HEALTH FACILITY WHEN ILL AND BUY ALL THE MEDICATION PRESCRIBED TO TREAT THE ILLNESS %	LACK OF TOILETRIES TO BE ABLE TO WASH EVERYDAY %
UGANDA	**NATIONAL ESTIMATE**	**31**	**29**
Sex	Male	31	29
	Female	31	29
Age Group	0-5	31	30
	6-8	31	29
	9-14	31	29
	15-18	30	29
Number of children in the Household	1	28	25
	2	29	28
	3	31	31
	4	32	29
	5+	32	29
Orphan	No	30	29
	Yes	36	33
Place of Residence	Rural	34	32
	Urban	23	21
PRDP areas (conflict affected)	Severely affected	47	47
	Sporadically affected	25	31
	Spill overs	34	28
	Rest of Uganda	29	26

Health deprivation rates were much higher in rural areas. In the PRDP conflict-affected areas, the highest rates of health deprivation are in the districts most severely affected by conflict. The spill over affected conflict areas had slightly higher health deprivation rates compared with Uganda as a whole. There is little difference by gender or children's age– with boys and girls of all age groups suffering from similarly high levels of health deprivation, which shows the extent to which about a third of Ugandan children do not receive the health care they need.

There is a gradient of increasing health deprivation with the number of children in the household – the more children, the more deprived. The serious problem of unaffordable health care and the high cost of buying drugs was discussed by Focus group participants in Mbarara and Sorota in 2017:

> **%MBARARA #37** *RM: There are no affordable hospitals. One may toil to earn say two thousand shillings to buy food and meet medical needs. When you get ill and go to a medical facility, you are asked to pay five thousand shillings yet one has no food already.*

> **%SOROTI #55** *P6: Sometimes you might even see the doctor but now coming to the side of drugs, there are no drugs. They tell you to go and buy drugs yet some people cannot afford drugs.*
>
> *P1 People are ending up in getting loans once you have gone to see the doctor, they have prescribed the drugs. But there is no way you can buy the drugs, you have seen that you may take three days without getting the drugs.*

Focus group participants were particularly concerned about being unable to afford to get medical care for sick children.

> **%MOROTO #43** *P10 We lack money for taking our children for treatment. I wake up early in the morning to go and collect firewood in the bush but I come back home to find the children are sick yet the little money I make from firewood is meant for food and it is not even enough for food.*

> **%MOROTO #46** *P6 The biggest problem here is we lack money to treat children when they fall sick. We struggle to dig and burn charcoal to earn a living*

4.2.4 Food Security

The Ugandan Constitution makes repeated references to food security. In Article XIV and Article XXII, the duties of the State are outlined – to ensure the establishment of "*national food reserves*" and "*to encourage and promote proper nutrition through mass education and other appropriate means.*" Uganda's official poverty line reflects whether households can meet calorie-based norms, although, as a method of setting a poverty line, this has been abandoned by many countries. The approach taken here is to use a more direct indicator of food (in)security - whether or not children are able to afford to have three meals a day.

There was near universal (92%) agreement in Uganda that children should be able to have three meals a day. Despite this, as Table 4.10 shows, a large proportion (42%) of Ugandan children were unable to eat three meals a day because their families could not afford it. Food insecurity was greater in rural areas (46%) than urban areas (29%) and varied considerably across PRDP districts. While 40% of children in 'severely affected' districts were affected, it is concerning that prevalence rates were much higher in 'sporadically affected' districts, where over three-quarters (77%) of children were food insecure. Around one-third (37%) of children in the rest of Uganda were unable to afford three meals a day. There were no clear differences by gender or age of the child but households with five or more children did have greater than average rates of food insecurity.

TABLE 4.10: **Food Insecurity among Children (%) in 2019/20**

		UNABLE TO AFFORD 3 MEALS A DAY (%)
UGANDA	**NATIONAL ESTIMATE**	**42**
Sex	Male	42
	Female	42
Age Group	0-5	42
	6-9	42
	9-14	42
	15-18	41
Number of Children in the Household	1	38
	2	40
	3	41
	4	41
	5+	44
Orphan	Yes	52
	No	41
Place of Residence	Rural	46
	Urban	29
PRDP areas (conflict affected)	Severely affected	40
	Sporadically affected	77
	Spill overs	42
	Rest of Uganda	37

Food insecurity is greatest among children identified as monetary poor. Table 4.11 shows that 70% of monetary-poor children and over a third (34%) of the monetary non-poor children are unable to afford three meals a day. Two-thirds of multidimensional poor children (66%) do not receive three meals a day due to a lack of money, showing that food insecurity remains a problem across Ugandan society. These findings are consistent with previous research which identified that *"Children in rural and urban research localities complained about having insufficient food to eat, commonly reporting eating only one or two meals a day."* (Pereznieto et al, 2011).

92%
of the respondents agree that children should be able to have three meals a day.

42%
of Ugandan children were unable to eat three meals a day

Food insecurity was **greater in rural areas** than in urban areas

URBAN AREAS
29%

RURAL AREAS
46%

40%
of children in 'severely affected' districts were food insecure

77%
of children in 'sporadically affected' districts were food insecure

37%
of children in the rest of Uganda were unable to afford three meals a day

TABLE 4.11: **Food Insecurity among Children by Poverty Status in 2019/20**

		UNABLE TO AFFORD 3 MEALS A DAY (%)
MD Child Poverty	Poor	66
	Not Poor	23
Monetary Child Poverty	Poor	70
	Not Poor	34

Focus group participants in 2017 explained the impoverished diets that some poor families provided for their children due to the lack of money to buy adequate food:

> **MOROTO #45** *P8 Most people here are now surviving on residue from the local brew. The remnants of the local brew which is squeezed from the maruwa like posho. Usually the mothers come and pick from the brewing points and take it home. Sometimes, the mothers now boil it and give it like porridge for the children to drink because they may be tired of eating the residue like that - it's what the people are now surviving on.*

> **%MOROTO #48** *P6: We are poor because we lack food to eat and sometimes beg for residue of local brew to feed the family members which is not solid food.*

These Focus Group findings are consistent with previous research in Moroto which found, "*An example of particularly bad nutritional practices, which can potentially harm children, was identified in Moroto. Several mothers participating in FGDs reported that children, sometimes five years old or younger, were often raised on mildly alcoholic brews and forced to eat the dried mash or wort from the brewing process*" (**Pereznieto et al, 2011**).

4.2.5 Decent Shelter

Adequate shelter is an essential need, critical to children's healthy development and growth and to their survival. Several measures are used to reflect the quality of children's living environments, including the dwellings construction materials, levels of overcrowding and the types of fuel used for lighting and cooking.

All Ugandan citizens have a Constitutional Right to decent shelter (Article XIV (b)), which the State shall endeavour to fulfil. Shelter is the most fundamental of basic human needs and one which is frequently violated. Assessing what constitutes 'decent shelter' is open to interpretation. Still, all accepted indicators of housing quality agree that, at the very least, there should be protection from the elements (reflected by the quality of building materials) and the avoidance of overcrowding.

Overcrowded conditions are common in many urban areas. In 2006, UN-HABITAT (2007) highlighted the fact that when people live in homes with four or more people per room, they experience a loss of dignity and are more susceptible to infectious diseases and domestic violence. UN-HABITAT (2007) noted how children, in particular, are affected by overcrowding, not only by disease and violence but also through the lack of space to do homework in a quiet space and by disrupted sleep through having to share a bed with parents or siblings. UN-HABITAT has highlighted the importance of dwellings being made with durable materials, according to national building codes and standards, but that this rarely happens in many countries. It estimated that, in 2006, over 10% of urban households in sub-Saharan Africa lived in non-durable housing made from inferior quality building materials, such as mud or dung floors (UN-HABITAT, 2010). No similar estimate was made of the proportion of rural households living in similar conditions.

UNICEF has used a measure of shelter deprivation for nearly 20 years (Gordon et al., 2003; UNICEF, 2006), which combines information on overcrowding and the quality of building materials. The threshold for overcrowding for children is set at five or more people per room, and deprivation in terms of building quality is reflected by whether the house has a floor made of natural materials, such as mud, earth or dung. Table 4.12 (below) shows two indicators of shelter deprivation. The first, shelter deprivation I, is the proportion of children living in households which are either overcrowded (5+ people per room) OR who live in a home with a mud floor. The second indicator, Shelter deprivation II, reflects the proportion of children in households who experience both these conditions, i.e., live in overcrowded conditions AND also in homes with a mud floor. This second measure reflects a more

severe level of deprivation, with more serious implications for children's health and development.

Overall, it appears that a large proportion of children in Uganda are shelter-deprived, with 40% in overcrowded homes or in non-durable dwellings (with a mud floor). This form of deprivation is more prevalent in rural areas (44%) than in urban areas (28%). Interestingly, rates of shelter deprivation in PRDP districts, either severely or sporadically affected, were lower than in the rest of Uganda. There was no variation in prevalence by sex or orphanhood, but (as one would expect) deprivation was greater in households with larger numbers of children. Table 4.13 shows there were large differences between poor and not poor children, under both monetary and MD measures.

If the more extreme measure of shelter deprivation is considered, where children live in overcrowded conditions and in dwellings with mud or dung floors, around one child in seventeen (6%) was affected. This figure is much lower among urban households (3%) than rural (7%). As noted above, these conditions are likely to be very detrimental to children's health and development and will affect their chances of escaping poverty. Larger households and poorer children are more likely to be shelter deprived.

10%

of urban households in sub-Saharan Africa lived in non-durable housing made from inferior quality building materials

40%

of children in Uganda in overcrowded homes or in non-durable dwellings

URBAN AREAS **44%**

RURAL AREAS **28%**

TABLE 4.12: **Shelter Deprivation among Children by Socio-Economic Characteristics in 2019/20**

		SHELTER DEPRIVED I - MUD FLOOR OR OVERCROWDED (%)	SHELTER DEPRIVED II - MUD FLOOR AND OVERCROWDED (%)
UGANDA	**NATIONAL ESTIMATE**	**40**	**6**
Sex	Male	40	6
	Female	40	6
Age Group	0-5	43	7
	6-9	43	7
	9-14	38	5
	15-18	33	4
Number of Children in the Household	1	28	0
	2	29	0
	3	45	8
	4	43	8
	5+	42	7
Orphan	Yes	38	5
	No	40	6
Place of Residence	Rural	44	7
	Urban	28	3
PRDP areas (conflict affected)	Severely affected	35	4
	Sporadically affected	35	5
	Spill overs	32	7
	Rest of Uganda	44	6

TABLE 4.13: **Shelter Deprivations among Children by Poverty Status in 2019/20**

		SHELTER DEPRIVED I - MUD FLOOR OR OVERCROWDED (%)	SHELTER DEPRIVED II - MUD FLOOR AND OVERCROWDED (%)
MD Poverty	Poor	52	9
	Not Poor	31	3
Monetary Poverty	Poor	53	12
	Not Poor	36	4

4.2.6 Fuel Use and Cooking Facilities

Section 39 of the Ugandan Constitution provides that "*Every Ugandan has a right to a clean and healthy environment*". An important environmental determinant of child health is the type of fuel used in the home for lighting and cooking. Some fuels, like electricity and gas, are less polluting than others, such as burning wood, charcoal, or crop residue (so-called 'solid fuels'). The UNHS 2022 data show that there were few (if any) households (4% urban vs <1% rural) in Uganda which were not using solid fuels for cooking. This almost universal use means children are exposed daily to damaging pollutants in the smoke from solid fuel fires. Given the universal use of solid fuels for cooking, data on its prevalence are not presented in the tables below (Tables 4.14 and 4.15). The tables show what proportion of children in Uganda live in households with access to electricity and other lighting forms and what households have for cooking facilities, i.e., a separate kitchen or outside space for cooking, which would result in environmental pollution from solid fuel smoke.

In 2022, just over one-half (58%) of children lived in households with access to electricity as the main source of lighting (this included those using solar power). Around one in six children (16%) lived in households which relied on gas and/or paraffin for lighting. Urban areas were better covered (73%), and just over half of rural children (53%) lived in dwellings with access to electricity. Monetary and multidimensionally non-poor children were much more likely to live in homes with electricity (or solar) for lighting than poor children.

In terms of fuel for cooking, almost all (98%) Ugandan children lived in households using solid fuels (i.e., charcoal, firewood, or dung) and relatively few used gas, paraffin or electricity. This pattern was observed across all ages, genders, geographic and, interestingly, socio-economic groups – where poor and non-poor children were both as likely to be using solid fuels for cooking. Most Ugandan households cooked outside, either in a separate building (65%) or in the open air (21%).

A Focus Group participant in 2017 from Lira argued that a lack of electricity resulted in her children being at an educational disadvantage:

> **%LIRA #29** *Participant (F): ...When children come back from school at night, they should first read their books before they go to bed. Because we do not have electricity, it becomes a problem for them to do so.*

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TABLE 4.14: **Fuel for Lighting and Cooking in 2019/20**

		LIGHTING FUEL FOR LIGHTING					COOKING FUEL FOR COOKING				TYPE OF KITCHEN		
		ELECTRICITY (INCL. SOLAR) (%)	GAS OR PARAFFIN (%)	CANDLES (%)	FIREWOOD/ DUNG (%)	OTHER LIGHTING FUEL (%)	ELECTRICITY (INCL. SOLAR) (%)	GAS OR PARAFFIN (%)	CHARCOAL/ FIREWOOD/ DUNG (%)	OTHER COOKING FUEL (%)	INSIDE (%)	OUTSIDE, SEPARATE BUILDING (%)	OPEN SPACE (%)
UGANDA	**NATIONAL ESTIMATE**	**58**	**16**	**1**	**2**	**23**	**1**	**0**	**98**	**0**	**15**	**65**	**21**
Sex	Male	58	17	1	2	23	1	0	98	0	14	65	21
	Female	58	16	1	2	23	1	0	98	0	15	64	21
Age Group	0-5	56	17	1	2	25	1	0	98	0	15	60	24
	6-9	59	17	1	2	21	2	0	98	0	14	64	21
	9-14	59	17	1	1	22	1	0	98	0	14	68	18
	15-18	61	15	1	1	22	1	0	98	0	14	68	18
Number of Children in the Household	1	56	16	2	2	25	2	1	96	1	18	49	34
	2	59	16	1	2	22	2	0	97	0	16	57	26
	3	58	16	1	2	23	1	0	98	0	15	61	24
	4	59	16	1	2	22	1	0	98	0	13	67	20
	5+	57	17	1	2	24	1	0	99	0	14	71	15
Orphan	Yes	54	17	1	3	25	2	1	97	0	15	63	22
	No	58	16	1	2	23	1	0	98	0	14	65	21
Place of Residence	Rural	53	19	1	2	26	1	0	99	0	14	69	18
	Urban	73	10	2	1	14	4	1	96	0	18	53	30
PRDP areas (conflict affected)	Severely affected	41	14	1	0	43	1	0	99	0	16	66	18
	Sporadically affected	30	8	1	16	46	1	0	99	0	36	34	30
	Spill overs	42	29	0	0	29	0	0	100	0	18	72	10
	Rest of Uganda	69	16	1	0	14	2	0	98	0	10	67	23

TABLE 4.15: **Fuel for Lighting and Cooking by Poverty Status in 2019/20**

		LIGHTING FUEL					COOKING FUEL				TYPE OF KITCHEN		
		ELECTRICITY (INCL. SOLAR) (%)	GAS OR PARAFFIN (%)	CANDLES (%)	FIREWOOD/ DUNG (%)	OTHER LIGHTING FUEL (%)	ELECTRICITY (INCL. SOLAR) (%)	GAS OR PARAFFIN (%)	CHARCOAL/ FIREWOOD/ DUNG (%)	OTHER COOKING FUEL (%)	INSIDE (%)	OUTSIDE, SEPARATE BUILDING (%)	OPEN SPACE (%)
MD Child Poverty	Poor	41	22	1	3	33	0	0	99	0	15	62	23
	Not Poor	72	12	1	0	15	2	0	97	0	14	67	19
Monetary Child Poverty	Poor	35	23	1	6	35	0	0	99	0	18	58	24
	Not Poor	65	14	1	0	19	2	0	98	0	14	67	20

4.2.7 Water and Sanitation

Ugandan children's constitutional right to "*clean and safe water*" is outlined in Articles XIV (b) and XXI, but with no explicit definitions as to what constitutes 'clean' or 'safe', UNICEF and the WHO have devised standards of water quality, based on the source of water, with two main classifications: 'improved' and 'unimproved'. Improved sources are those considered to be protected from outside contamination and typically include piped water and water from boreholes, protected wells and protected streams, rainwater and bottled water. Unimproved sources include open surface water sources, such as rivers, dams, lakes, as well as water from unprotected wells and springs.

In 2017, the WHO added two indicators to reflect access to water: a basic water service and a limited water service. These later categories reflect those used by Gordon et al. (2003) to indicate moderate and severe water deprivation by including time to collect water along with the source. A basic water service is one where the source of water is improved and the collection time is within 30 minutes. A limited service is the use of an improved source, but the collection time is greater than 30 minutes. Both are likely to provide lower estimates of deprivation than those of Gordon et al. (2003), as they combine distance and source as elements in the final assessment. The Gordon et al. (2003) indicators of water deprivation showed whether households were either using an unsafe, unimproved source or had a long collection time for water (of >30 minutes).

Tables 4.16 and 4.17 present information on four indicators of access to water according to the standard definitions of (i) improved, (ii) unimproved sources, as well as (iii) one reflecting moderate deprivation (MDG Water deprivation). This includes households either using an unimproved water source or having a more than 30-minute water collection time. Finally, (iv) severe water deprivation refers to households using unsafe, open water sources (i.e., even more restrictive than unimproved sources) or who have a greater than 30 30-minute collection time (Gordon et al., 2003).

In terms of water sources, over three-quarters (79%) of children in Uganda were using water from an improved source in 2022. This impressive level of provision was apparent across all household types. Where differences are apparent, it is with regard to collection times, as reflected in the MDG and Severe water deprivation indicators. Poorer households are less likely to have a water source close to their home and must travel to collect water for daily use. Around one-third (31%) of children live in households which are moderately (MDG) water-deprived, and one-fifth (20%) are severely deprived. Clear socio-economic gradients are observed when collection times are included in a measure of access, suggesting lower levels of provision and access for the poor in Uganda. Given that many children are most likely to be collecting water for the household, this issue is of concern, given the known physical impacts of carrying heavy loads on child health (e.g., musculoskeletal injuries).

Tables 4.16 and 4.17 also present data on three other indicators – two on access to sanitation and a third on whether households have handwashing facilities located near the household toilet. This could include a sink for washing hands, with or without soap. The MDG sanitation deprivation indicator shows those households that only have access to unimproved forms of sanitation (shared latrines, unimproved pit latrines, etc.). Severe sanitation deprivation indicates those households with no access to any sanitation facilities whatsoever – these children and their households are using the bush, fields and, plastic bags and open ground in urban areas.

Even in its milder form (MDG deprivation), sanitation deprivation affects around one in three (31%) children in Uganda. This rises to four in ten in rural areas (40%) and one in four in urban areas (26%). Severe deprivation affects a smaller proportion nationally (7%), with most cases occurring in rural areas. This shows the need to ensure better sanitation provision in rural areas. Only one in five (19%) children lived in homes with handwashing facilities located near the toilet.

The links between poor sanitation and child illness and early mortality cannot be stressed strongly enough, and ensuring that this deprivation is tackled is essential, not least because it is relatively simple to do, requiring no new or expensive technologies.

TABLE 4.16: **Water and Sanitation among Children in 2019/20**

		GLOBAL WATER SUPPLY AND SANITATION ASSESSMENT						
		IMPROVED WATER SOURCE (%)	UNIMPROVED WATER SOURCE (%)	MDG WATER DEPRIVATION (%)	SEVERE WATER DEPRIVATION (%)	MDG SANITATION DEPRIVATION (%)	SEVERE SANITATION DEPRIVATION (%)	HANDWASHING FACILITY NEXT TO TOILET (%)
UGANDA	**NATIONAL ESTIMATE**	**79**	**21**	**31**	**20**	**37**	**7**	**19**
Sex	Male	79	21	31	20	37	7	19
	Female	79	21	31	20	36	7	19
Age Group	0-5	79	21	32	21	39	9	17
	6-9	78	22	31	20	37	7	19
	9-14	79	21	31	20	36	6	20
	15-18	80	20	29	19	34	5	23
Number of Children in the Household	1	82	18	27	16	38	7	17
	2	80	20	30	19	37	7	19
	3	77	23	32	20	39	7	20
	4	79	21	32	20	35	7	19
	5+	80	20	31	21	36	7	19
Orphan	Yes	78	22	32	23	42	8	18
	No	79	21	31	20	36	7	19
Place of Residence	Rural	76	24	35	23	40	8	17
	Urban	88	12	18	10	26	4	26
PRDP areas (conflict affected)	Severely affected	89	11	23	17	37	7	25
	Sporadically affected	85	15	26	21	59	34	24
	Spill overs	93	7	19	14	31	8	14
	Rest of Uganda	73	27	36	22	35	3	19

TABLE 4.17: **Water and Sanitation Deprivation among Children by Poverty Status in 2019/20**

		GLOBAL WATER SUPPLY AND SANITATION ASSESSMENT						
		IMPROVED WATER SOURCE (%)	UNIMPROVED WATER SOURCE (%)	MDG WATER DEPRIVATION (%)	SEVERE WATER DEPRIVATION (%)	MDG SANITATION DEPRIVATION (%)	SEVERE SANITATION DEPRIVATION (%)	HANDWASHING FACILITY NEXT TO TOILET (%)
MD Child Poverty	Poor	77	23	35	24	45	12	10
	Not Poor	81	19	28	17	30	3	26
Monetary Child Poverty	Poor	79	21	33	23	47	18	11
	Not Poor	79	21	31	19	34	4	21

There is a clear association between poverty and access to basic water and sanitation services (Table 4.17). The poor are less likely to be using improved water sources, more likely to be water and sanitation-deprived and less likely to have hand washing facilities in the home. This shows that children in poor households are more likely to be exposed to dangerous pathogens linked to poor sanitation and unsafe water and thus at greater risk of illness and premature death. Rates of severe sanitation deprivation are four times higher among the poor than among the not poor.

Focus group respondents in 2017 from Kibuye, Mbarara, Hoima, and Moroto explained the serious problems of children having to drink unsafe water and the efforts required to obtain water:

> **%KIBUYE #11**
>
> *R-M: We are sharing drinking water with animals, so this affects the children, and they easily get affected by diseases.*
>
> *R-M: The community / village is so badly off, it shares the water points with other villages and animals, so this is not safe for the children and when it rains, the rain water is drunk and is also no safe.*

> **%MBARARA #42** *RF; Says they are mostly affected by lack of water for use such as bathing. They are badly off because they move very long distances to collect/fetch water which is not even clean water.*

> **%HOIMA #11** *Rf [...] We have one well, which is on the upper side. If you want water you will walk for a whole mile to get water.*

> **%MOROTO #44** *P5&9 ...You get [there and] the line is too long. A person really goes to the borehole at 6am, and at this time the line is still long. Your work is to just wait for the lines, or if you have 100 shillings, you go to the tap water. That day if the water is not really there, a person can charge you with ready fetch water per jerrycan as 300 or even 500 shillings.*

Focus group respondents from Mbale and Moroto also explained how poverty results in inadequate sanitation and the inability to sometimes even afford to buy soap:

> **%MBALE #35** *RF: There is a problem of poor sanitation in the village, people have no toilets and those who have are in sorry state so in that case others end up going to the bushes.*

> **%MOROTO #45** *P8 We don't have pit latrines here and the only problem is lack of money. So, you find that the landlords target for shelter and you will find that a person is building homes for people to rent and gets money but doesn't have money to waste on building toilets.*

> **%MOROTO #45** *P8 So you imagine, how you have struggle to send the kid to school then after that you fail and get broke to get money for the soap even. So this kid will end up putting on this uniform until the term closes, when its dirty because you don't have money to pay for the soap yet you also struggling to feed the kid.*

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4.2.8 Crime and Children

The UNHS 2016/2017 and UNHS 2019/20 asked respondents if they, or any household members, had been the victims of crime in the 12 months preceding the survey. Respondents could report experience of any of the following crimes against persons and/or property: housebreaking, burglary, thefts, child-related crimes, malicious property damage, murder (homicide), defrauding and 'other'.

In 2019/20, questions about being a victim of cybercrime (e.g., identity theft, email hacking, bank account hacking, mobile money theft, online harassment, phone harassment, etc.) were included and asked of all household members aged 5 and over. Information on these variables was aggregated to all household members and children living in homes where one or more of the above crimes were reported were identified as having experienced a crime. Exposure to such crimes undoubtedly has an impact on the social and psychological wellbeing of A CHILD, EVEN IF the crime committed is not a violent one.

Overall, a quarter of Ugandan children (25%) were exposed to a crime in the 12 months before the 2019/20 survey. Table 4.18 (below) shows that the most prevalent form of crime children and their families experienced was theft (19%), cybercrime (5%) and housebreaking (3%), crimes that can cause significant stress. Although cyber crimes have now become prevalent enough to be measured in Ugandan surveys, a more positive development is that there has been a fall in non-cyber crimes in Ugandan households with children. In 2016/17, over a quarter of children (27%) lived in households which had been victims of non-cyber crimes in the previous 12 months. By 2019/20 this had fallen to less than a quarter of children (22%).

TABLE 4.18: **Reported Experience of Crime in 2016/17 and 2019/20**

TYPE OF CRIME	2016/17 %	2019/20 %
Thefts	23	19
Housebreaking	6	3
Malicious property damage	3	2
Defrauding	2	0.5
Burglary	2	1
Child related crimes	0.9	0.3
Murder (Homicide)	0.2	0.2
Cyber crime	-	5

Table 4.19 shows that, in 2019/20, both MD poor and monetary poor children were less likely to be victims of crime and cyber-crimes compared with children who were not poor. This pattern of crime victimisation by poverty was also found in 2016/17. This may be because poor children and their families do not have many things of value which are worth stealing.

However, even though poor children may be less likely to become a victim of crime in Uganda, the impact of crime can be considerable for the poor. Focus groups participants in 2017 discussed the problem of crime:

> **%MBARARA #37** *RM: We are very poor because we have many thieves and street kids that snatch the little we have worked for.*

1 IN 4

of Ugandan children were exposed to a crime in the 12 months before the 2019/20

The most prevalent form of crime children and their families experienced

THEFT **19%**

CYBER CRIME **5%**

HOUSEBREAKING **3%**

There has been a fall in non-cyber crimes in Ugandan households with children.

2016/2017 **27%** | *2019/2020* **22%**

The rate of cyber-crime for children was **twice as high in urban areas** than in rural areas

RURAL AREAS **8%** | *URBAN AREAS* **4%**

15%

lowest rates of children suffering from ordinary crime **were in the severely affected PRDP areas**

28%

highest rates of children suffering from ordinary crime **were in the sporadically affected**

TABLE 4.19: **Crime by Poverty Status in Uganda in 2019/20**

		ORDINARY CRIME %	CYBER CRIME %
UGANDA	**NATIONAL ESTIMATE**	**22**	**5**
MD Child Poverty	Poor	21	2
	Not Poor	23	8
Monetary Child Poverty	Poor	17	2
	Not Poor	24	6

TABLE 4.20: **Ordinary Crime and Cyber-Crime Victimization among Children in 2019/20**

		ORDINARY CRIME (%)	CYBER CRIME (%)
UGANDA	**NATIONAL ESTIMATE**	**22**	**5**
Sex	Male	22	5
	Female	22	5
Age Group	0-5	21	5
	6-9	21	5
	9-14	23	6
	15-18	23	5
Number of Children in the Household	1	19	7
	2	21	6
	3	22	5
	4	23	4
	5+	23	5
Orphan	Yes	24	4
	No	22	5
Place of Residence	Rural	22	4
	Urban	21	8
PRDP areas (conflict affected)	Severely affected	15	3
	Sporadically affected	28	3
	Spill overs	23	6
	Rest of Uganda	22	6

Table 4.20 (above) shows that the prevalence of ordinary crime was similar between urban and rural areas. However, although low, the rate of cyber-crime for children was twice as high (8%) in urban areas than in rural areas (4%). There were few differences in the likelihood of children being a victim of ordinary crime by gender, age group or orphan status. However, larger households are more likely to suffer from ordinary crime than smaller households. The number of children in the household seems to slightly increase the likelihood of being a victim of ordinary crime and decrease the likelihood of being a victim of cyber-crime.

Surprisingly, the lowest rates of children suffering from ordinary crime (15%) were in the severely affected PRDP areas, and the highest rates were in the sporadically affected areas (28%). The patterns for cyber-crime victimisation of children are different with the spill over PRDP areas and the rest of Uganda having twice the cyber-crime rates (6%) than the severely and sporadically affected areas (3%).

Focus group participants in 2022 had a different perception of the distribution of crime in Uganda compared with the UNHS 2016/17 and 2019/20 survey results, with several participants considering that urbanisation resulted in young people being more likely to be victims of crime or involved in criminal activity than those living in rural areas of Uganda – which were generally perceived to be safer.

> **%BUGANDA S #1261-1287** *Slum development creates disputes over space use, high crime rates as lots of envy, children dress indecently, more extramarital affairs, changing social norms and loss of folk stories.*

> **%BUGANDA N #1240** *Availability of jobs, but children behave badly, increased crime rates, migration, bad influence, prostitution, diseases, pollution, adolescents end up stealing as they don't want to work.*

> **%BUGANDA N #341-349** *Drug abuse due to lack of employment, high crime rate, demonstrations because urbanisation not delivering promises.*

> **%LANGO #826-843** *Crime, alcoholism, disobedience, watching violent films at cinema and robberies, used by gangs, love money so they steal, more street children.*

> **%LANGO #145-157** *More prevalence of HIV, children are sick, too many thieves, more crime than in rural areas, more drunks and drug abuse.*

Regarding access to technology, focus group participants in 2022 also thought that urbanisation provided adolescents with:

> **%LANGO #735-738** *Better access but misused, for crime.*

4.2.9 Clothing Deprivation/Adequate Clothing

Article XIV (b) of the Constitution provides all Ugandans with the right to "*adequate clothing*". The UNHS 2019/20 asks several questions about the clothing needs of household members. Clothing is valuable in protecting people from the elements and helping them avoid shame and stigma and feel like part of a community during important social occasions, such as weddings, celebrations and funerals. In cold countries, such as the United Kingdom, surveys using the Consensual Approach have asked respondents about items such as 'all-weather shoes' or 'coats for rainy or cold days'. In a warm country such as Uganda, the questions asked were about whether children could have at least two pairs of shoes, whether they could have some new clothes and whether they had at least two sets of clothes. The final column of Table 4.21 shows a summary indicator of whether children are deprived of any of these clothing-related SPNs.

If any indicators reflect the extent of deprivation among children in Uganda, it is surely clothing deprivation. In Uganda in 2019/20, seven out of ten children (70%) lacked at least one item of essential clothing. Around one in five (11%) children report being deprived of having two sets of clothes, six out of ten lack two pairs of shoes, and more than half (52%) rely on second- or third-hand clothes, with their families unable to afford at least some new clothes for them. These deprivations are prevalent across rural and urban areas (worse in rural areas). Clothing deprivation rates are consistent across the main demographic variables, with older children less deprived than younger ones. A clear gradient is apparent for households with more children, particularly those with four or more children. Orphans were also slightly more likely to be clothing deprived (63%) than children living with both their parents (60%). Clothing deprivation varies considerably across PRDP districts; while 85% of children in "severely affected" districts are clothing deprived compared with just over half of children (52%) in the rest of Uganda.

70%
of children lacked at least one item of essential clothing

AROUND
1 IN 5
children report beingdeprived of having two sets of clothes

60%
lack two pairs of shoes,

MORE THAN HALF
rely on second or third-hand clothes

Clothing deprivation varies considerably across PRDP districts;

SEVERELY AFFECTED	*REST OF UGANDA*
85%	**52%**

Disparities between the poor and not poor were very clear

NEARLY
9 IN 10
MD poor children deprived of having two pairs of shoes

8 IN 10
not having any new clothes

1 IN 5
lack 2 sets of clothes

NEARLY HALF
49%
of non-poor children were deprived of one or more clothing items

TABLE 4.21: **Child Clothing Deprivation in Uganda in 2019/20**

		TWO PAIRS OF PROPERLY FITTING SHOES (%)	SOME NEW CLOTHES (%)	TWO SETS OF CLOTHING (%)	CHILD CLOTHING DEPRIVATION (%)
UGANDA	**NATIONAL ESTIMATE**	**60**	**52**	**11**	**70**
Sex	Male	60	52	11	70
	Female	60	51	11	69
Age group	0-5	62	51	12	70
	6-9	59	52	11	69
	9-14	60	53	11	70
	15-18	56	50	10	67
Number of children in the household	1	48	44	8	59
	2	53	47	9	64
	3	58	51	11	69
	4	60	52	12	69
	5+	66	55	12	74
Orphan	No	60	51	11	69
	Yes	63	61	14	76
Place of residence	Rural	66	55	12	75
	Urban	40	41	7	53
PRDP areas (conflict affected)	Severely affected	85	64	22	86
	Sporadically affected	68	52	11	75
	Spill overs	70	55	8	77
	Rest of Uganda	52	49	10	64

Disparities between the poor and not poor (see Table 4.22) were very clear with regards to clothing, with nearly nine out of ten (88%) MD poor children deprived of having two pairs of shoes, eight out of ten (77%) not having any new clothes, one in five (19%) lacking two sets of clothes and 96% deprived of one or more essential clothing items. However, nearly half (49%) of non-poor children were also deprived of one or more clothing items.

TABLE 4.22: **Child Clothing by Poverty Status in Uganda in 2019/20**

		TWO PAIRS OF PROPERLY FITTING SHOES (%)	SOME NEW CLOTHES (%)	TWO SETS OF CLOTHING (%)	CHILD CLOTHING DEPRIVATION (%)
UGANDA	**NATIONAL ESTIMATE**	**60**	**52**	**11**	**70**
MD Child Poverty	Poor	88	77	19	96
	Not Poor	37	31	4	49
Monetary Child Poverty	Poor	88	78	21	94
	Not Poor	52	44	8	63

4.2.10 Information Deprivation

Section 41 of the Ugandan Constitution provides every citizen with *"the right of access to information"*. In a fast-developing society such as Uganda, access to reliable information is critical for many reasons. More informed parents can make better decisions affecting their children's lives. Children with access to computers and other technology can develop useful skills to aid their education and improve their chances of better-paid, skilled jobs in later life.

Given the range of available sources, assessing a concept such as information deprivation is challenging. The UNHS 2019/20 asked respondents about access to technologies, including computers, mobile phones, radios and televisions. While not seeking to downplay the importance of less technological sources, these data were used to show what proportion of children in Uganda have access to sources of information.

Tables 4.23 and 4.24 (below) set out the extent of computer use, access to the Internet, ownership of the mobile phone, exposure to mass media through radio and television and, lastly, the extent of severe information deprivation. This is defined as children living in households which lack either radio, TV, computers or mobile phones.

Table 4.23 shows that access to mobile phones was widespread, with 78% of children in households having access to a mobile telephone (74% rural vs 89% urban). Across the regions, access to mobile phones was generally high, but in 'severely affected' PRDP areas, less than half of children (48%) live in households with a mobile phone. Even among the MD poor, access was high, with 65% of MD poor children in households with a mobile phone.

Over 60% of all households lacked a radio, 81% lacked a TV and 98% lacked a computer in the home. Nearly one in five children (17%) lacked any information source at home and were considered severely information deprived. The figure is much lower in urban areas (8%) and highest in 'severely affected' PRDP areas, where 47% of children were severely information deprived.

Ownership (and use) of technology, such as computers, is very low across Uganda (Table 4.24). MD poor children were about four times more likely to be severely information-deprived than non-poor children (29% and 8% affected, respectively). Only around 1% of children had used a computer in the previous three months (even among the older age groups, the figure was only 2%), and internet use was around 1%. Only richer children and those living in urban areas reported any internet use.

MD poor children were **about four times** more likely to be severely information-deprived than non-poor children

MD POOR **29%** | *NON-POOR* **8%**

ONLY **AROUND 1%** of children had used a computer in the previous three months

Only richer children and those living in urban areas **reported any internet use.**

TABLE 4.23: **Child Information Deprivation in Uganda in 2019/20**

		USED A COMPUTER IN THE LAST 3 MONTHS YES (%)	USE THE INTERNET YES (%)	MOBILE PHONE YES (%)	RADIO NO (%)	TV NO (%)	COMPUTER NO (%)	SEVERE INFORMATION DEPRIVATION DEPRIVED (%)
UGANDA	**NATIONAL ESTIMATE**	**1**	**1**	**78**	**61**	**81**	**98**	**17**
Sex	Male	1	1	77	62	82	98	18
	Female	1	1	78	61	81	98	17
Age group	0-5	0	0	76	64	83	98	19
	6-9	0	0	77	62	81	98	18
	9-14	0	0	79	59	81	98	16
	15-18	2	2	80	58	79	98	15
Number of children in the household	1	1	1	73	65	78	98	21
	2	1	1	78	62	79	98	17
	3	1	1	76	63	80	98	18
	4	1	0	77	61	81	99	18
	5+	1	0	80	59	84	98	15
Orphan	No	1	1	79	60	81	98	16
	Yes	0	0	69	67	85	98	26
Place of residence	Rural	0	0	74	62	89	99	20
	Urban	2	2	89	58	57	96	8
PRDP areas (conflict affected)	Severely affected	0	0	48	77	97	99	47
	Sporadically affected	0	0	70	61	93	98	23
	Spill overs	1	0	80	58	90	99	15
	Rest of Uganda	1	1	83	60	74	98	12

TABLE 4.24: **Child Informaiton by Poverty Status in Uganda in 2019/20**

		USED A COMPUTER IN THE LAST 3 MONTHS YES (%)	USE THE INTERNET YES (%)	MOBILE PHONE YES (%)	RADIO NO (%)	TV NO (%)	COMPUTER NO (%)	SEVERE INFORMATION DEPRIVATION DEPRIVED (%)
UGANDA	**NATIONAL ESTIMATE**	**1**	**1**	**78**	**61**	**81**	**98**	**17**
MD Child Poverty	Poor	0	0	65	73	96	100	29
	Not Poor	1	1	88	51	69	97	8
Monetary Child Poverty	Poor	0	0	56	80	98	100	38
	Not Poor	1	1	84	56	76	98	11

4.2.11 Disability

It is estimated that nearly 240 million children worldwide are living with disabilities (UNICEF, 2022) and, in Uganda, the estimated population of disabled children is 2.5 million (UNICEF and Ministry of Gender of Uganda, 2015; as cited in Zia et al., 2022). This group of children is disproportionally affected by childhood diseases, such as malnutrition or acute respiratory infection, and disadvantaged in education, career development and quality of life (UNICEF, 2021). Protecting and supporting disabled children and their families is a human rights priority.

The UNHS 2019/20 asks several questions about difficulty seeing, hearing, walking (or climbing), remembering (or concentrating), self-caring and communicating of household members. The answers can be 'no difficulty', 'yes, some difficulty', 'yes, a lot of difficulty', and 'cannot do at all'. According to the Washington Group Short Setof Functioning (WG-SSF), disability is defined as answering 'some difficulty', 'a lot of difficulty' or 'cannot do at all' to at least one question[20].

As shown by Tables 4.25 and 4.26, about 6% of children had a disability. The distribution of disability was also similar across different demographic and social groups, except for children in 'severely affected' (8%) and 'sporadically affected' (9%) PRDP areas, where the proportions of disabled children were slightly higher than the rest of Uganda. There is little difference between MD poor and non-poor groups (5%-6%).

TABLE 4.25: **Disability among Children Aged 5 and 17 Years in Uganda in 2019/20**

		DISABILITY (%)
UGANDA	NATIONAL ESTIMATE	6
Sex	Male	6
	Female	5
Age group	0-5	6
	6-9	5
	9-14	6
	15-18	6
Number of children in the household	1	6
	2	6
	3	6
	4	6
	5+	5
Orphan	No	5
	Yes	6
Place of residence	Rural	6
	Urban	5
PRDP areas (conflict affected)	Severely affected	8
	Sporadically affected	9
	Spill overs	6
	Rest of Uganda	4

TABLE 4.26: **Disability among Children Aged Between 5 and 17 Years by Poverty Status in 2019/20**

		DISABILITY (%)
UGANDA	NATIONAL ESTIMATE	6
MD Povert	Poor	6
	Not Poor	5
Monetary Poverty	Poor	5
	Not Poor	6

Although disability rates are not higher amongst poor children than non-poor children, research has shown that the COVID-19 pandemic had a great impact on disabled people in Uganda. Sandar and Geoffrey (2022) argue that, in Northern Uganda, *"people with disabilities (PWD) experienced extreme neglect, marginalisation, and harassment due to a lack of disability-specific measures during the pandemic and lockdowns." (**Sandar and Geoffrey, 2022, p1**)*

20 see The Washington Group on Disability Statistics; http://www.washingtongroup-disability.com

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For example, a disabled woman student in Northern Uganda explained her situation;

*"COVID-19 has brought so many problems. I am a student and schools have been closed and so there is no more education. Secondly, the other huge problem is hunger because the way of generating household income has reduced and in other cases completely halted; for instance my mum is a teacher and the money she gets to pay for my school fees and for food comes from her teaching and as schools have been closed and there is no teaching, there is greater hunger. The other one is means of transport, movement has become difficult even if they [authorities] say people with disabilities are free to move and they can be carried [transported] but still we find that the security personnel (police and the army) will stop you asking for permission letters to move, even though you are disabled." (**Sandhar and Geoffrey, 2022, p3**).*

4.2.12 Social Protection

The International Labour Organization (ILO) defines the "*social protection floor" as "sets of basic social security guarantees*" that can prevent or alleviate poverty, social exclusion, and vulnerability[21]. A range of government support schemes are available in Uganda. The UNHS asked whether a household member was a beneficiary of the National Agricultural Advisor Services Programme, Operation Wealth, Senior Citizens' Grant, Youth Livelihood, Uganda Women's Entrepreneurship Programme or Northern Uganda Social Action Fund 3 Programme. If any household member was a beneficiary, the household was considered to have received government support.

Table 4.27 shows that only 0.06% of children in Uganda lived in households which had received any government support. This is amongst the lowest rates of social security in the world. Households with older children, more children, those in urban areas, and those in 'severely affected' PRDP areas reported slightly higher proportions in receipt of some government support.

21 see https://www.ilo.org/secsoc/areas-of-work/policy-development-and-applied-research/social-protection-floor/lang--en/index.htm

TABLE 4.27: **Receipt of Government Support in Uganda in 2019/20**

		RECEIVING GOVERNMENT SUPPORT (%)
UGANDA	NATIONAL ESTIMATE	0.06
Sex	Male	0.05
	Female	0.06
Age group	0-5	0.00
	6-9	0.00
	9-14	0.00
	15-18	0.43
Number of children in the household	1	0.04
	2	0.04
	3	0.03
	4	0.06
	5+	0.08
Orphan	No	0.05
	Yes	0.07
Place of residence	Rural	0.05
	Urban	0.07
PRDP areas (conflict affected)	Severely affected	0.16
	Sporadically affected	0.02
	Spill overs	0.10
	Rest of Uganda	0.04

As shown in Table 4.28, MD and monetary poor children's households were slightly more likely to have received government support than non-poor children but the differences were very small.

TABLE 4.28: **Receipt of Government Support by Poverty Status in 2019/20**

		RECEIVING GOVERNMENT SUPPORT (%)
UGANDA	NATIONAL ESTIMATE	0.06
MD Child Poverty	Poor	0.07
	Not Poor	0.05
Monetary Child Poverty	Poor	0.10
	Not Poor	0.04

These very low levels of social protection have profound consequences for child poverty in Uganda which are discussed in more details in the next section.

Social Protection Expenditure

Social protection across the life cycle can play a key role in addressing the deprivations highlighted in the analysis and to strengthen the resilience of poor families. There should be strengthened efforts to implement the National Social Protection Policy which was adopted in 2016, and ensure its implementation. There is a significant opportunity to use social protection as a tool and contextualise it to respond to the most pressing deprivations. A social protection investment case has demonstrated the positive impact social protection can have and the feasibility of other potential programmes (UNICEF, 2017). The ILO has also shown that universal coverage programmes can be successfully funded for as little as 1% of GDP in the case of basic pensions, 2% of GDP for child-focused transfers and 2-3% of GDP for primary health provision (Niño-Zarazúa et al., 2010; 2012).

In 2012, the governments, employers' and workers' organizations from 185 countries agreed to implement National Social Protection Floors. ILO Recommendation 202 states:

"National social protection floors should comprise at least the following four social security guarantees, as defined at the national level:

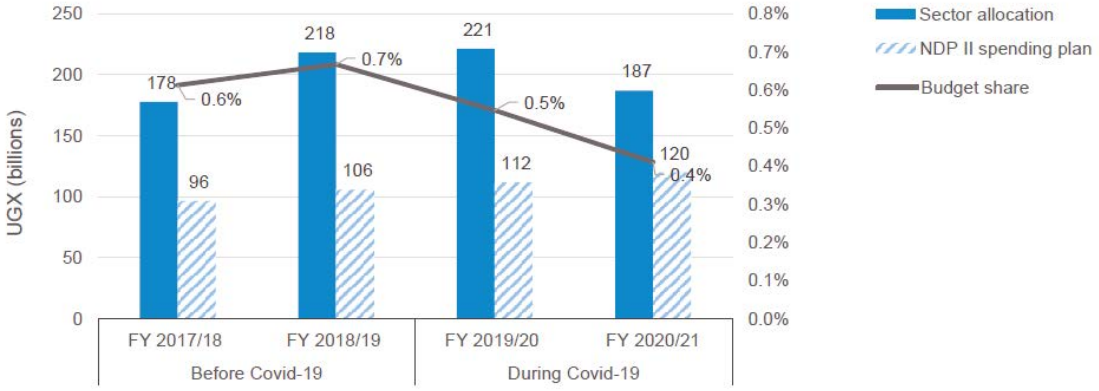
- *access to essential health care, including maternity care;*
- *basic income security for children, providing access to nutrition, education, care and any other necessary goods and services;*

- *basic income security for persons in active age who are unable to earn sufficient income, in particular in cases of sickness, unemployment, maternity and disability;*
- *basic income security for older person" (ILO, 2012)*

The Government of Uganda has agreed to try to meet the United Nations SDGs and the primary goal is to eradicate poverty everywhere and leave no-one behind. It was agreed that a key way to achieve this noble aim was to *"implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable"*[22]

It has been estimated that Uganda would need to spend 6.6% of its GDP on social transfers and health services to achieve the minimum level of income and health security required by ILO 202 (Bierbaum et al., 2017). Unfortunately, the Ugandan government's Budget allocates relatively little money to Health and Social Security compared to similar low-income African countries. For example, in 2015, Uganda spent only 0.78% of its GDP on Social Protection. Spending on Direct Income Support (DIS) was "*only 0.33 percent of GDP which is significantly lower than the 1.1percent of GDP which is spent on DIS on average by other low-income African countries.*" (NPA, 2015).

FIGURE 4.3: **Uganda Budget Allocation for Social Development 2017/18 to 2020/21**



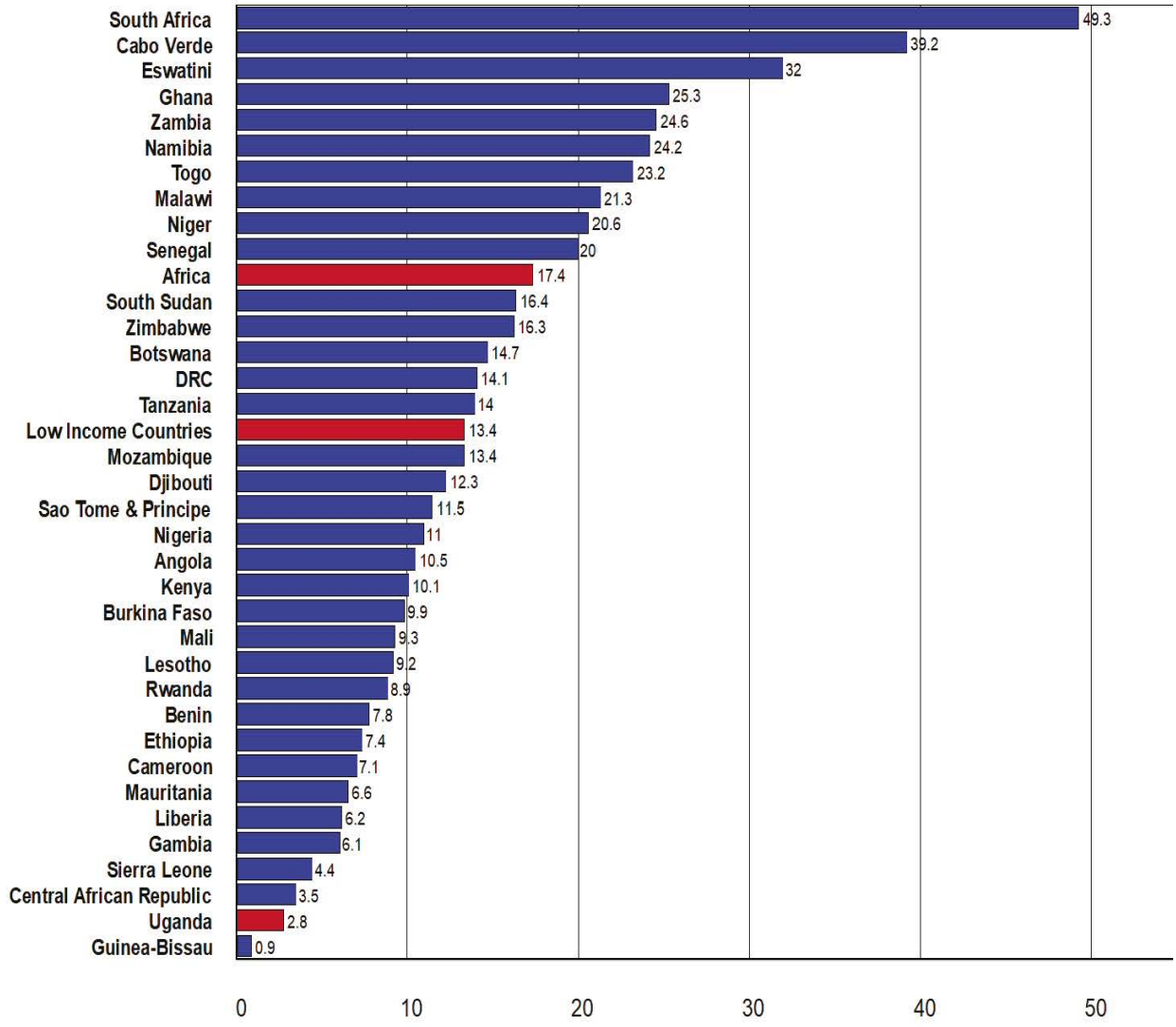
The COVID-19 pandemic had a greater impact on poor adults and children in Uganda than on the rest of society (see Chapter 5 below). Many countries responded to the pandemic by increasing expenditure on Social Development (which includes social protection monies) to help poor people survive the effects of the pandemic. Figure 4.19 (above) shows the Budget allocation for social development before and during the COVID-19 pandemic. Prior to the pandemic, in the 2018/19 financial year, the Government spent 0.7% of its Budget on social development; however, during the pandemic, social development spending declined to 0.5% of the Budget in 2019/20 and to 0.4% of the Budget in 2020/21 (Owori, 2018; 2021).

Figure 4.4 (below) shows that spending on social protection in Uganda is so low that less than 3% of the population receives any social protection benefit. Except for Guinea-Bissau, a smaller proportion of the population is covered by social protection measures than in any other African country. On average, in low-income economies, 13.4% of the population is covered by social protection measures and in African countries, the average is 17.4% of the population. By contrast, in Uganda in 2020, only 2.8% of people were covered by at least one social protection scheme. The estimated Budget Allocation for Social Development in 2020/21 was only UGX187 billion (0.4%) of the Government's Budget.

It is clear that the Social Protection Budget is far too low and too few people benefit for it to have any significant impact on reducing child poverty.

22 This is SDG Target 1.3

FIGURE 4.4: **SDG Indicator 1.3.1-Percentage of Population in Africa Covered by At Least One Social Protection Benefit (Effective Coverage) in 2020**



Source: *World Social Protection Report 2020-22.* Geneva, ILO

Other government spending and the tax system can also have positive redistributive effects which can help to alleviate poverty. Recent analyses found that;

"Uganda's domestic resource allocation to various pro-poor sectors pre-Covid-19 and during Covid-19 have increased marginally... Of great concern on prioritisation during the pandemic is the decline in planned allocation for the social development sector, which supports vulnerable groups in Uganda.

*Funding gaps in pro-poor sectors such as education (38%), health (38%) and agriculture (18%) amid the pandemic (FY 2020/21) undermine the government's ability to manage the immediate impacts of the pandemic on the poorest and address longer-term risks of increased vulnerability and leaving the poorest further behind" (**Owori, 2021, p21**)*

It is unsurprising that Uganda was ranked 44th out of 52 African countries in providing for its children's basic needs, largely due to its relatively low expenditures on social protection, education and health services for children compared with other African countries (ACPF, 2018). Education expenditure is only 2.6% of GDP. Health expenditure is 5.1% of total government expenditure, and social protection expenditure is only 2.2% of GDP. By comparison, the median amounts for African countries are 4%, 6.1% and 4.2%, respectively (ACPF, 2020b).

CHAPTER 5

THE COVID-19 PANDEMIC AND POVERTY IN UGANDA

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5.1 INTRODUCTION

The UNHS collected data during 2019 and 2020 and it is one of the very few surveys in the world that tracked changes in living standards before and during the early stages of the COVID-19 pandemic. Hence, the coverage of this survey is useful to assess more directly the immediate effects of the pandemic upon poverty. This advantage, however, comes at some costs. Understandably, the social distance measures to contain the spread of the virus affected data collection and the sub-samples (i.e., before and during COVID-19) might not be necessarily comparable. Hence, any comparison of poverty estimates before and during COVID-19 need to be carefully analysed.

This section analyses the observed changes in the prevalence of both monetary and MD poverty during 2019 and 2020. Table 5.1 shows the distribution of the total number of cases by period of data collection. The cases collected during 2019 up until February 2020 (n=31107, 48% of all cases), are considered to be before-COVID-19. The during COVID-19 period corresponds to all the undertaken interviews after February 2020 (n=33973, 52% of all cases). The findings from the UNHS are complemented with some basic analysis of the two first waves of the High-frequency survey data, which collected information during June and July/August 2020 and offer further insights of the negative short-term effects of the pandemic upon income and deprivation.

TABLE 5.1: **Distribution of the Total Number of Cases by Period of Data Collection**

YEAR	MONTH	TOTAL CASES COLLECTED (INTERVIEWED)
2019	1	0
2019	2	0
2019	7	0
2019	8	0
2019	9	4735
2019	10	104
2019	11	5926
2019	12	2755
2020	1	8963
2020	2	8624
2020	7	3934
2020	8	11465
2020	9	10918
2020	10	4226
2020	11	3430
2020	12	0

5.2 MONETARY AND MD CHILDPOVERTY PREVALENCE WITHOUT ADJUSTMENT BY SAMPLING DIFFERENCES: BEFORE AND DURING COVID-19

This section assesses whether the sub-samples (before and during COVID-19) are comparable, uses advanced statistical methods to correct for possible sampling differences and provides an estimate of the initial impact of the pandemic upon both monetary and MD poverty. The section is organized as follows. First, it describes the differences between both sub-samples. Second, it performs an analysis to make fairer comparisons of poverty between both sub-samples. Finally, it estimates the change in poverty attributable to the pandemic up to the months covered in the survey.

Table 5.2 (below) shows the design estimates (i.e., estimates drawn from the original survey weights) of the poverty rates before and during COVID-19. According to these figures, there was an increase in monetary poverty when comparing before and during COVID-19 population groups. According to these estimates, monetary poverty increased by 6% from 27% to 33%. When disaggregated by children, changes were of a similar magnitude compared with adults.

Table 5.3 (below) displays the change in prevalence of multidimensional poverty before and during COVID-19. According to the estimates, MD poverty increased 2% from 43% to 45%.

TABLE 5.2: **Prevalence of Monetary Child Poverty -Upper Line-Before and After Covid-19**

COVID-19	% TOTAL	2.5% CI	97.5 CI
Before	27	27	28
During	33	32	33

TABLE 5.3: **Prevalence of MD Child Poverty Before and After Covid-19**

COVID-19	% TOTAL	2.5% CI	97.5 CI
Before	43	42	44
During	45	45	46

5.2.1 Sampling Discrepancies

The above poverty figures might not be a valid representation of the change in poverty in the early stages of the pandemic. The presence of sampling differences could introduce systematic error to the estimates. Therefore, it is vital to examine whether the sub-samples are comparable.

There are different ways to assess the extent to which the two sub-samples (before and during COVID-19) are balanced and comparable. A widely used and formal assessment is based on Hellinger distances, which basically estimate the similarity of two given distributions. Although the pandemic affected several aspects of people's lives, there should not be major differences across several socio-demographic variables between the two sub-samples.

To assess the discrepancies between both sub-samples, the following socio-demographic variables were used: the distribution of the sex of the household head, the education attainment of the household head, the distribution of age groups, and the sample composition across regions and urban areas. The distributions of paired variables - before and during - were contrasted using Hellinger distances.

Table 5.4 shows the results of the analysis based on Hellinger distances. A common criterion used to assess the discrepancies is to denote those cases where the two distributions have a significant mismatch. The analysis suggests that the sub-samples are not comparable. There are important discrepancies across regions, the education attainment of the household head and urban/rural groups.

TABLE 5.4: **Hellinger Distances, Selected Variables (>0.05 Means a High Discrepancy)**

VARIABLE	HELLINGER DISTANCE
Sex hh	0.01
Education level hh	0.28
Occupation	0.08
Age hh	0.05
Region	0.11
Urban	0.40

Adjusted comparisons of monetary and multidimensional poverty

The previous section showed that the composition of each sub-sample is rather different. Hence, the conclusions about the change in the prevalence of poverty could be incorrect. There are two ways to reduce the differences between both sub-samples: Model-based adjustments and recalibration of the sampling weights. Model-based comparisons have the advantage of not requiring a reference population and making like-with-like comparisons. This approach also has the advantage of estimating an unbiased effect of the pandemic. However, it has the limitation of providing an assessment of the change in poverty from one sample to another but not an estimate of the prevalence of poverty.

Recalibration of sampling weights is more parsimonious and allows both an estimate of the change in poverty and also allows the prevalence rates to be calculated. However, this approach requires a reference population, which, in this case, would be the before COVID-19 representative population. It should be noted that, given the gap period between the Census and the UNHS 2019, the absolute validity of the before-COVID-19 sub-sample is uncertain.

5.2.2 Model-based comparisons

For the model-based comparisons, several statistical approaches (quasi-experimental designs) were used to find a model that produced the best comparisons. The technical details of the model-based adjustments are shown in Appendix II. That is, a model that resulted in balanced samples with no major differences across a series of socio-demographic, economic and geographic variables.

Table 5.5 displays the differences after matching both sub-samples according to the best pairing method. The sub-samples are quite balanced, and there are negligible differences between both groups. The advantage of these methods is that each unit in the sample has a matching weight, which offers the possibility of estimating adjusted differences across groups. For this section, it is of interest to compute the difference in the change of poverty before and during COVID-19.

TABLE 5. 5: **Comparison of the Mean Values of Model-Matched Sub-Sample**

VARIABLE	MEANS BEFORE	MEANS DURING
distance	0.5327	0.5308
urban	0.2932	0.2766
hhAgegr	3.7688	3.7829
hhsex	0.7125	0.7179
`factor(region)`1	0.1944	0.1883
`factor(region)`2	0.3386	0.3505
`factor(region)`3	0.2331	0.2394
`factor(region)`4	0.2339	0.2218
`factor(hhedlev)`1	0.1551	0.1522
`factor(hhedlev)`2	0.3748	0.3714
`factor(hhedlev)`3	0.1449	0.1539
`factor(hhedlev)`4	0.1522	0.1484
`factor(hhedlev)`5	0.0802	0.0791
`factor(hhedlev)`6	0.0929	0.0949
proof	0.7365	0.7387
pwall	0.4968	0.4920
pfloor	0.3727	0.3666

Based on this matched data, the results are displayed separately for monetary and multidimensional poverty.

Monetary poverty: Model-adjusted comparisons

Table 5.6 (below) displays the changes in the prevalence of monetary poverty considering the model-based adjustment and the unadjusted - sample design - result. According to the model-based approach, there was an increase in poverty of 7% before and during COVID-19. This is slightly higher than the unadjusted prevalence.

TABLE 5.6: **Comparison of Change Before and During Covid-19 in Monetary Child Poverty: Survey (Biased) Estimate and Model-Based (Unbiased) Estimate**

TYPE	CHANGE IN MONETARY CHILD POVERTY
Unadjusted/Original	5 % [+/-1%]
Model-based adjusted	7 % [+/-1%]

MD Child Poverty

Table 5.7 (below) shows the changes in the prevalence of poverty considering the matching method and the unadjusted -sample design- result. Similar to the case of monetary poverty, the model-based estimator suggests a higher increase in poverty relative to the unadjusted prevalence obtained from applying the original survey weights: an increase in poverty of 4% before and during COVID-19, relative to the original 2% increase.

TABLE 5.7: **Comparison of Change Before and During Covid-19 in MD Child Poverty: Survey (Biased) Estimate and Model-Based (Unbiased) Estimate**

TYPE	CHANGE IN MD CHILD POVERTY
Unadjusted/Original	2 % [+/-1%]
Model-based adjusted	4 % [+/-1%]

5.2.3 Estimation of the Change in Poverty Via Sampling Weights Post Stratification

The second main approach to make fairer comparisons before and during COVID-19 is based on the recalibration of the survey weights. This process consists of rebalancing the sampling weights using the distribution of a reference population. Because the objective is to rebalance the before and during COVID-19, the marginal distributions from the 2016 UNHS data - cross tabulations - of three variables were used: urban/rural, region and educational attainment of the household head. This operation rebalances the overall estimates from the UNHS 2019/2020 but is limited to correcting the within-sample bias, i.e., it does not affect the before and during COVID-19 estimates. Hence, as a second step, the re-weighting assumed that the before and during COVID-19 sub-samples should be, in principle, balanced. Therefore, the structure of the recalibrated overall populations was simply reproduced within sub-samples.

This recalibration process guarantees that the overall estimate matched the overall known distribution of urban/rural, region and educational attainment and, at the same time, it ensured less biased comparisons between sub-samples. Appendix II shows some diagnostics indicating that the recalibration procedure was successful.

Table 5.8 (below) displays the re-weighted poverty prevalence rates. The advantage of this procedure, relative to the model-based estimation, is that it permits reporting overall poverty rates and not only the changes between the two periods. The new UBoS Monetary poverty measure affected almost 30% of the population and MDC poverty was over 44%. Monetary poverty increased almost 7% during the pandemic and MDC poverty by 5%. These increases match those from the model-based analyses.

TABLE 5.8: **Comparison of Monetary and MD Child Poverty Before and During Covid-19: Adjustment Based on Post Stratification of the Sampling Weights**

PERIOD	MONETARY %	MONETARY_CI %	MDC %	MDC_CI %
Before COVID-19	26	[25.7-26.8]	41	[40.8-41.9]
During COVID-19	33	[32.1-33.5]	46	[45.5-46.8]
Total 2019/2020	30	[28.9-31.0]	44	[43.1-44.2]

5.3 CHANGES IN INCOME AND FOOD DEPRIVATION: HIGH-FREQUENCY PHONE SURVEY

This section uses data from the first two waves (June 2020 and July/August 2020) of the High-Frequency Phone Survey on COVID-19 that were undertaken by UBoS, with support from the World Bank. A series of reports have already been published showing the main findings for the different waves. This section focuses on income changes and food deprivation between June and August 2020.

5.3.1 Food Insecurity Experience Scale: June – July 2020

The High-Frequency survey collects data on food insecurity using the Food Insecurity Experience Scale (FIES). Figure 5.1 (below) shows the proportion of households reporting the experience of the eight events of food insecurity. According to this survey, in June 2020, food insecurity was more prevalent in Uganda than in July/August 2020. In June, more than half the population experienced dietary diversity deprivations. This problem fell markedly during July/August, but just over four out of every 10 households reported having a restricted diet in terms of food variety.

More severe events of food deprivation were more prevalent in June, with around 20% of households experiencing events of hunger and running out of food. By the next two months, there was a reduction in the proportion of households with these types of experiences.

FIGURE 5.1: **Experiences of Food Insecurity, June and July/August 2020**

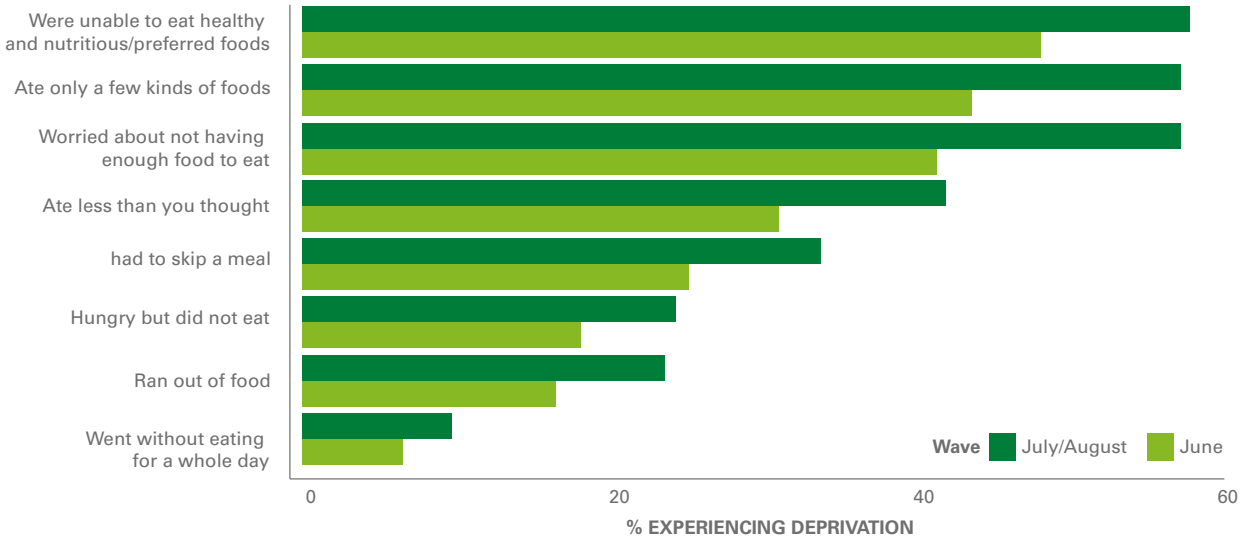
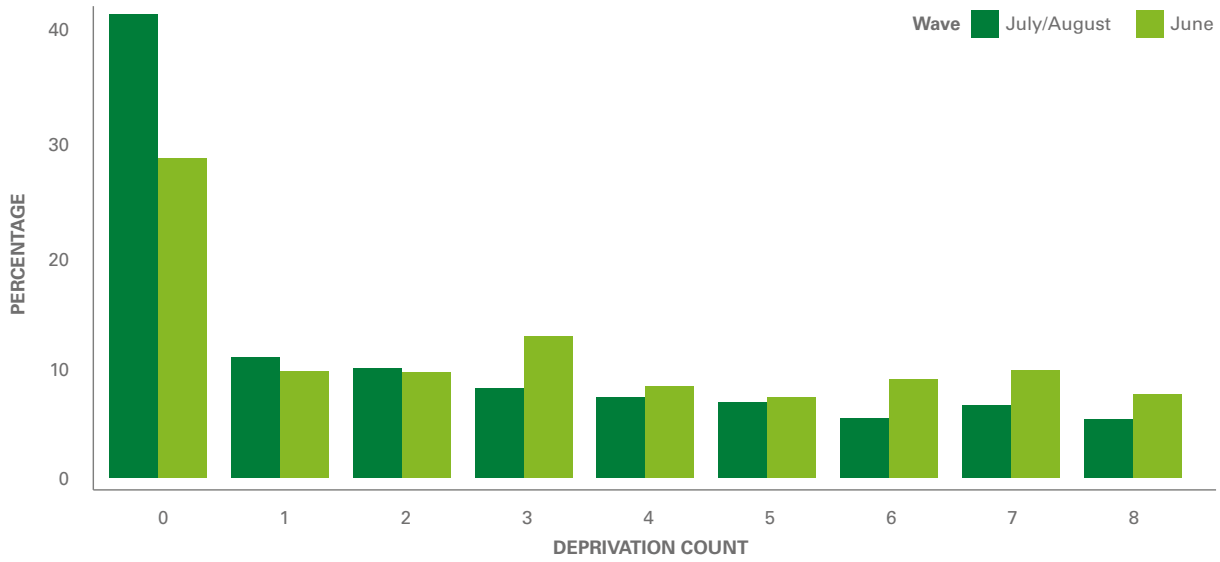


Figure 5.2 (below) shows the distribution of the FIES score for the two analyzed periods. The percentage of households reporting any of the food insecurity events dropped in July/August. In June, less than 30% of households suffered from no food insecurity. By July/August 2020, over 40% of households suffered from no food insecurity in Uganda.

FIGURE 5.2: **Food Deprivation Score, FIES Scale, June and July/August 2020**

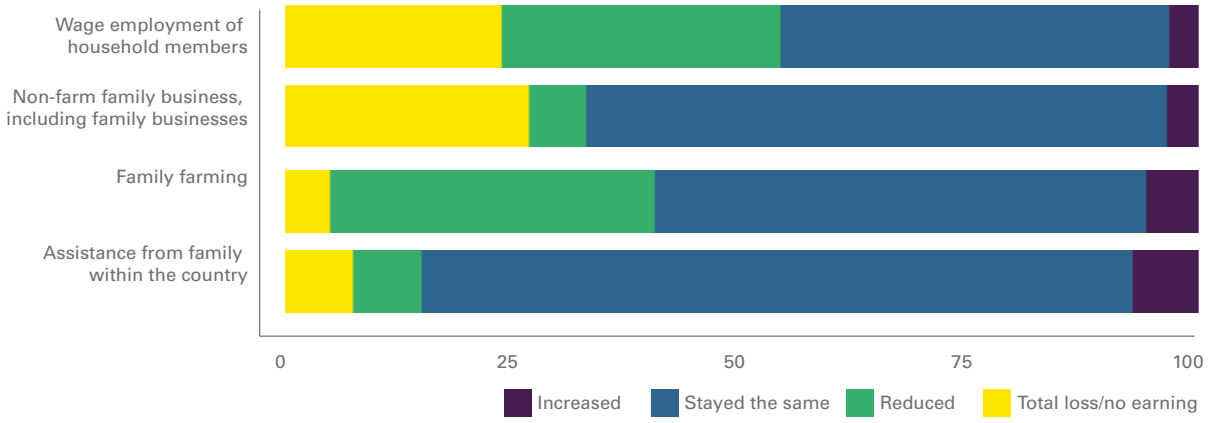


5.3.2 Impact Upon Income Sources

The pandemic had a larger impact on household incomes in June 2020 than in the following two months. However, in both periods, there are clear signs of economic strain in Ugandan households. In June, households' income fell across all sources of income with either reductions or a total loss[23]. For example, in June 2020, around half of respondents reported a reduction or a total loss of their wage employment (Figures 5.3 and 5.4) (UBOS, 2020a; 2020b).

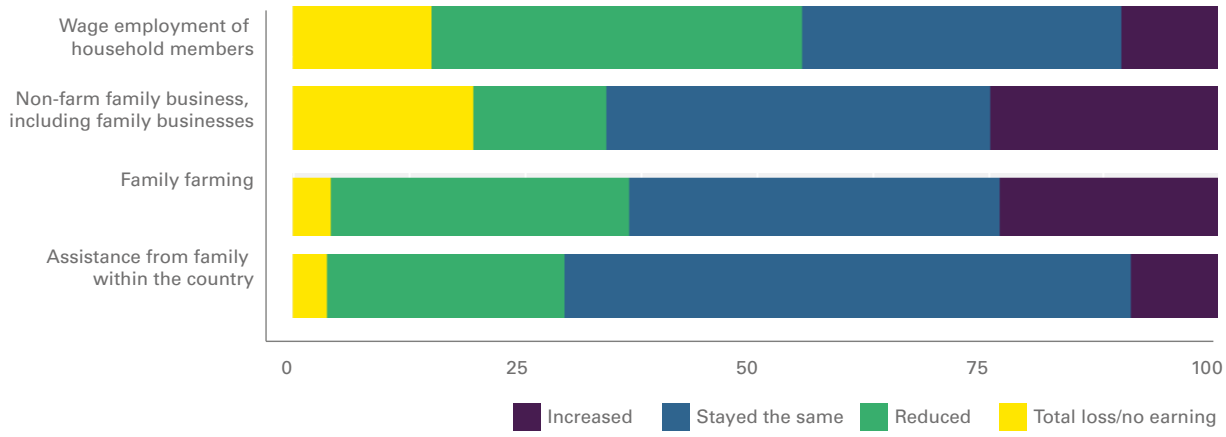
By July/August 2020, there were more households reporting increases in income, but there was a drop in the proportion of households reporting reductions or total losses. Hence, although there were some signs of recovery relative to June 2020, a significant percentage of households reported income losses across all the different sources.

FIGURE 5.3: **Impact of Covid-19 Upon Income Sources, First Wave = June 2020**



23 Only those sources with more than 10% of valid cases are reported

FIGURE 5. 4: **Impact of Covid-19 Upon Income Sources, Second Wave = July/August 2020**



To appreciate the short-term fluctuations in wages more deeply, Figure 5.5 (below) plots the changes in the four reported statuses: Increased, stayed the same, reduced and total loss. Most households remained the same - thick lines - and very few reported an improvement - narrow lines. Some households reporting a total loss in June seemed to recover during July/August. Similarly, some households suffering from reductions in salaries in June reported that their salary stayed the same, relative to the previous 12 months, by July/August.

FIGURE 5.5: **Changes in Wages from Employment in the Last 12 Months**

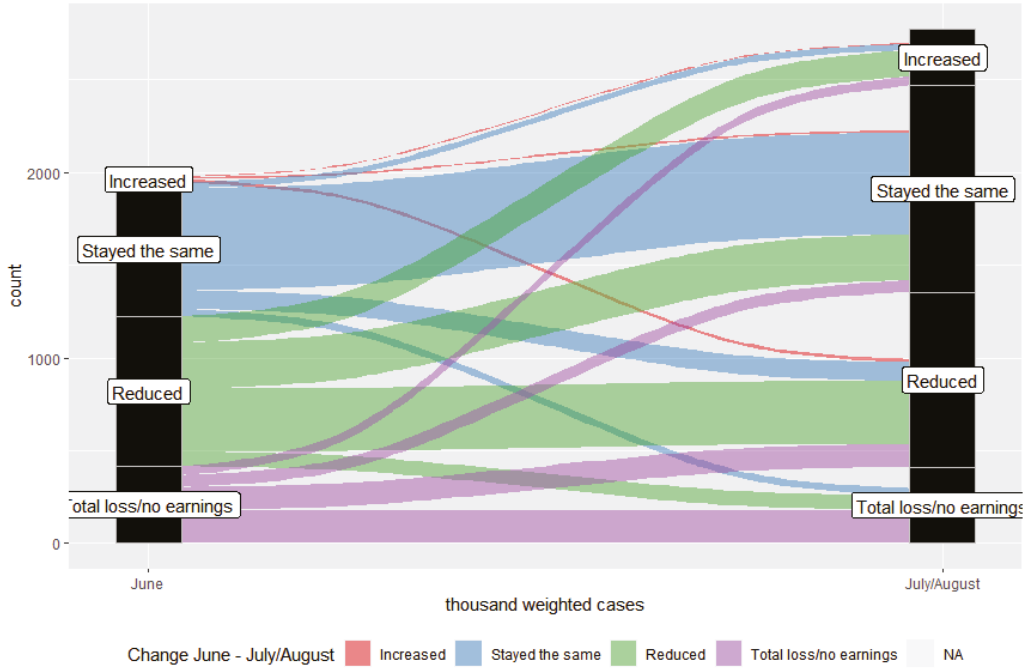
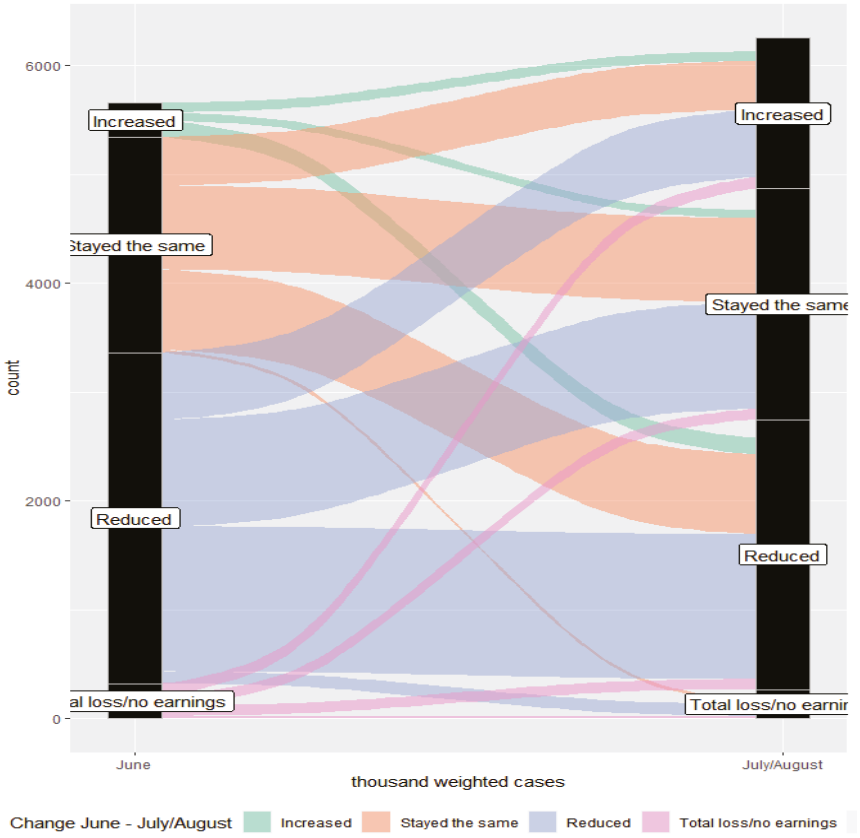


Figure 5.6 (below) displays the changes in earnings from family farming, livestock or fishing reported in June and then in July/August 2020. In June, almost half of households reported a reduction or a total loss. By July/August, there is a small number that reported improvements. However, some households that, in June, had no losses, reported an income reduction in July. Although there were some signs of recovery by July/August, the recovery was not clear or systematic.

FIGURE 5.6: **Changes in Earnings from Family Farming, Livestock or Fishing in the Last 12 Months**



5.4 CONCLUSION

The COVID-19 pandemic led to an increase in both monetary and MD poverty. However, the estimate of this increase, based on the original weights of the survey, seems to underestimate the extent of poverty in Uganda after February 2020. After correcting the biases in sampling differences before and during COVID-19, monetary poverty increased by 7% and MD poverty by 5%.

The results of the second main approach (post-stratification) led to the same conclusion: poverty increased in Uganda during the pandemic, even after taking into consideration sampling differences. The magnitude of the changes in both monetary and MD poverty match the results of the model-based approach. The results from the first two waves of the High-Frequency survey show that, in June 2020, most households in Uganda had income losses relative to 2019, although by August, the incomes of some households showed signs of recovery. However, the effects of the pandemic continued to be widespread. This is consistent with the above findings of the significant increases in poverty during the pandemic.

CHAPTER 6

THE GEOGRAPHY OF CHILD POVERTY IN UGANDA

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6.1 INTRODUCTION

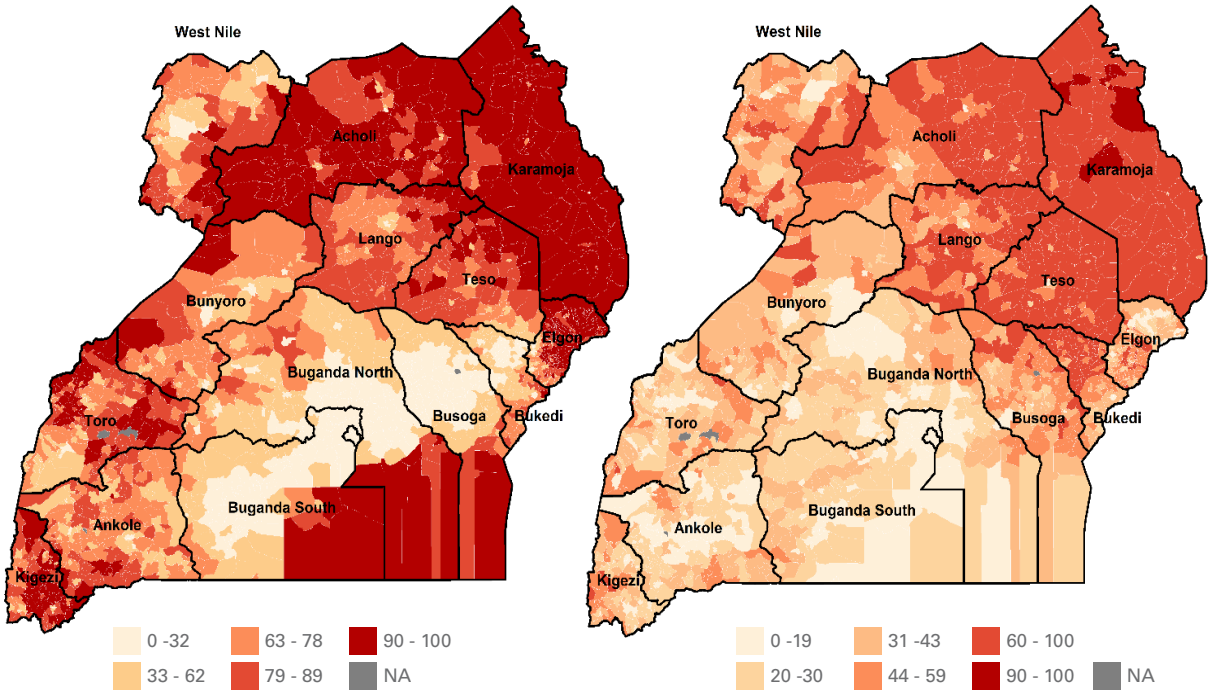
The design of effective and efficient anti-poverty policies can be aided by estimates of MD poverty for small areas, which enable resources to be targeted at the areas with the greatest needs.

As discussed in Chapter 4, children in parts of Northern Uganda (for example, Karamoja) suffer from the highest levels of monetary and multidimensional child poverty in Uganda, whereas Kampala and other regions such as Buganda South and Ankole show, on average, considerably lower levels. This overall regional picture can hide considerable variation within these regions. The UNHS sample size and design allow poverty estimates to be made for the 15 main sub-regions of Uganda and to compare regions. However, the lack of estimates at a lower geographical level may give policymakers the false impression that Uganda can be easily divided into poor and non-poor regions.

By contrast, the Uganda Census conducted in 2014 suggests that there is considerable subregional variation in living standards in Uganda. Figure 6.1 shows the subcounty distribution of wall-building materials and shoe deprivation (left and right panes, respectively) within each region, according to the 2014 Census. Although Karamoja contains many of the sub-counties with the highest level of deprivation, the Kigezi, Ankole, Toro and Buganda North regions also contain sub-counties with higher levels of deprivation.

In summary, there is a clear need to produce small-area estimates of MD and monetary poverty and explore within-region heterogeneity.

FIGURE 6.1: **Percentage of Households With Wood/Mud/Tin Walls (Left) and Percentage of Households with At Least One Household Member Without One Pair of Shoes (Right) (Uganda Census, Subcounty Level, 2014)**



The UNHS is a robust and comprehensive survey. However, its sample of about 15,000 households means that it cannot be used to reliably measure child poverty for areas smaller than the fifteen sub-regions. District, subcounty or even parish level estimates can be produced by using the Uganda Census but the latter is only carried out every 10 years and lacks the relevant information to calculate monetary or MD poverty.

To produce reliable small area estimates of the distribution of MD and monetary poverty in Uganda, it is necessary to combine the UNHS estimates with the national Census 2014 data. Small area poverty estimation (SAE) is a field of social statistics that provides a series of strategies and methods to estimate poverty rates for small areas by combining different data sources, particularly survey and census data (Rao and Molina, 2015). Drawing upon the SAE literature, this chapter includes the first small areas estimates of MD adult and child poverty (UNICEF, 2019) for district and sub-district areas, obtained using recent advances in SAE methodology (Pratesi, 2016; Rao and Molina, 2015).

6.2 SAE METHODOLOGY

Contemporary SAE methods are designed to combine the strengths of surveys and population censuses. They do this by exploiting the availability of common information in both national surveys and the Census. This common information is used to create a statistical model to predict a variable of interest, such as monetary or MD poverty, in the national survey. After this mathematical model has been tested and validated, it is then applied to the Census data to produce small area estimates of the variable of interest (e.g., monetary or MD poverty).

Four main stages involved in SAE are presented in this section:

- Assessment of the degree of similarity of the common variables in both UNHS and Population Census
- Producing and fitting a predictive model of multidimensional child poverty using the UNHS data
- Predicting and validating the multidimensional poverty estimate by applying the best model found in step 2 to the Census data
- As MD child poverty has decreased considerably in most regions between 2014 and 2019, we adjusted the 2014 estimates to reflect the 2019 regional estimates.

6.2.1 **Stage 1:** Assessment of the Common Variables in Both UNHS 2019/20 and Population Census 2012

A key task in SAE is to find an optimal set of variables that can be used to predict the outcome of interest (in this case monetary and MD child poverty). These variables need to be measured in a similar way in both UNHS surveys and the 2014 Census so that it is possible to estimate poverty rates using the information in the Census. A random sample from the 2014 Population Census was provided by UBoS (in close collaboration with UNICEF). The sample contained socio-demographic information from 730,407 households, which was large enough to produce estimates with confidence at the parish level. Ideally, when the Census and the Survey are undertaken at the same time (i.e., same year), the point estimates will be very similar in both sources and any differences are likely to be mainly due to sampling error. However, a range of factors can affect the comparability of the UNHS and the population Census:

a) There is a three-year gap between the 2014 Census and the 2016/17 UNHS and a six-year gap between the Census and the 2019/20 UNHS. Part of the latter was also carried out during the Covid-19 pandemic. As detailed in Chapter 5, it is unlikely that the prevalence of poverty and its drivers have remained the same over this period. Some of these differences will indeed reflect real changes, while others will reflect sampling/coverage/non-response or measurement error.

b) The methods used to identify the number of household members was different. The UNHS provided information on usual residents who were able to respond, whereas the Census provided information about the usual residents as well as information about guests and household members who were not present during the interview. Therefore, the identification of the household head may also have been different (i.e., the household head may have been away at the time of the UNHS survey interview) and variables like the occupation of the household head may not be strictly comparable. Hence, some key variables like household size or the socio-demographic profile of the household head cannot be included in the model (the effect of this omission is explored below).

c) The Census data provided by UBoS was a random sample of the whole Census, which includes all areas of Uganda, whereas the UNHS does not cover all areas of the country.

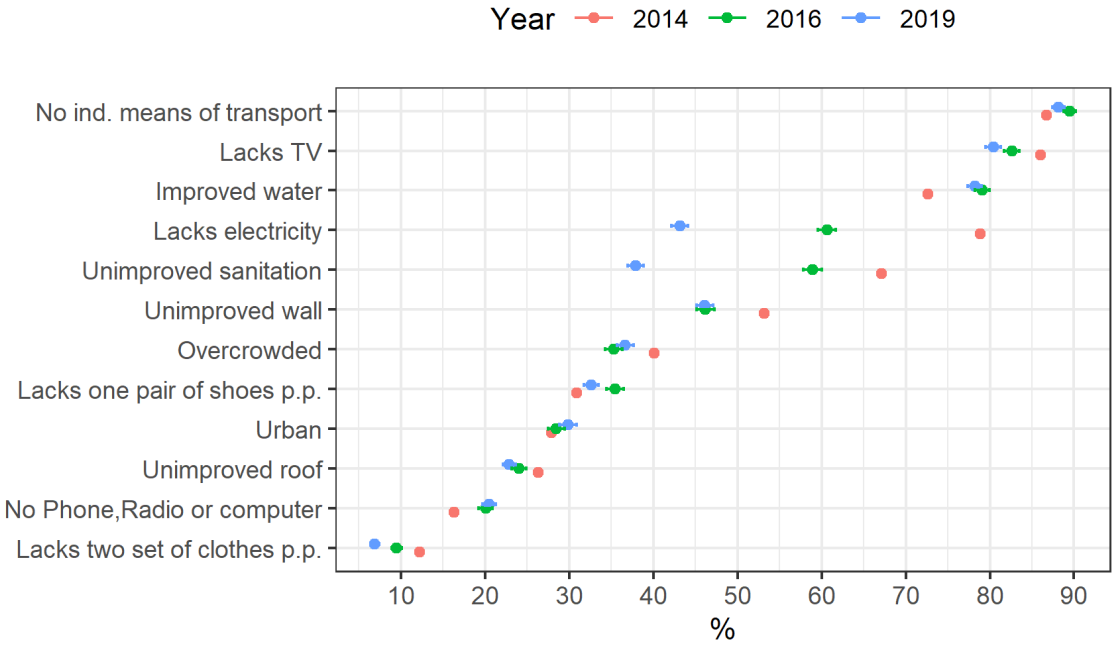
The UNHS and 2014 Census contain a common sub-set of variables such as whether the household has independent means of transport, lacks a TV, improved sources of drinking water and electricity or improved sanitation, walls and roofs and whether it was located in an urban or rural area. These datasets also included information on whether everyone in the household had at least one pair of shoes, two sets of clothes and at least one means of communication (either a radio, a phone or a computer).

As detailed in (b) above, one of the greatest challenges of creating a predictive model in a survey like the UNHS and then applying it to census data is that the two are often not collected at the same time. Figure 6.2 (below) shows that there were considerable increases between 2014 and 2019 in the percentage of households who had improved water as well a considerable drop in households who lacked electricity, had unimproved sanitation and walls and were overcrowded. Absolute changes in the other indicators are generally smaller and the percentage of households living in urban areas seems to have remained unchanged.

Although a perfect match between the distribution of Census and survey variables is not a requirement for SAE, the changes in the prevalence of some of these deprivation between the 2014 Census and the 2019/20 UNHS is so great that it would be impossible to produce reliable estimates of 2019/20 MD poverty by combining these two datasets. Too many of the underlying determinants of poverty have seen too large a change between 2014 and 2019/20. Because of the changes between 2014 and 2019/20 and the challenges faced during the collection of the 2019/20 UNHS, adjusting either of these two datasets to match the other will most likely result in unreliable estimates. By contrast, the 2016/17 UNHS can be more easily adjusted to match the distribution of the 2014 Census, using regional post-stratification. This allows us to produce reliable sub-regional estimates of 2014 MD poverty[24].

In summary, 2014 small area estimates have been produced as the 2014 Census provides the most trustworthy source of information on regional rates of a wide range of demographic and deprivation variables[25].

FIGURE 6.2: **Prevalence of Households' Characteristics for Predictors of Monetary and MD Child Poverty, 2014 Census, UNHS 2016/17 and UNHS 2019/20**



6.2.2 **Stage 2:** Producing a Predictive Model of Multidimensional Poverty Using the UNHS 2019/20 Data

Having chosen the most appropriate survey and census data, the second step consists of finding a regression model capable of making good predictions of the poverty status (poor or not poor) of each respondent given a set of available variables - based on the list of variables such as those in Figure 6.2. In this case, the dependent variable is a binary variable distinguishing poor and non-poor households, so the model adopted is a logistic regression model. These predictors were used in the recalibrated 2016/17 UNHS to predict multidimensional poverty.

A wide range of nested models was fitted, and the best model according to best specificity, sensitivity, Negalkerke $R^{2,}$ WAIC and Loo indices (Vehtari et al., 2017) was chosen and is shown below in Table 6.1. The model is a Hierarchical Bayes (HB) Logistic Regression model. The literature suggests implementing a hierarchical estimator, such as the HB, to allow for these contextual/area-based effects, which overcomes many of the issues of other poverty SAE models (Guadarrama et al., 2014; Haslett and Jones, 2010; Rao and Molina, 2015).

24 The survey weights of the 2016 UNHS were re-calibrated to match the distribution of key variables in the 2014 Census. Table X1 in the Appendix compares the distribution of these variables before and after calibration.

25 Moreover, the Census provides more precise estimates of the association between these variables at the regional level (e.g. the percentage of households in Toro who lack improved roofs and lack electricity).

TABLE 6.1: **Hierarchical Bayesian Logistics Regression Model (Log Odds Coefficients)**

	MODEL 3*	RHO**
(Intercept)	-5.2	1.0
Urban	-0.2	1.0
clothes deprivation	0.5	1.0
shoes deprivation	1.0	1.0
roof deprivation	0.2	1.0
wall deprivation	0.4	1.0
Electricity deprivation	0.6	1.0
No tv	1.5	1.0
Improved water		
Number of children	0.3	1.0
Overcrowding	0.3	1.0
Sanitation type (Ref: Flush toilet)		
Latrine	0.5	1.0
Covered pit latrine	1.0	1.0
Covered pit latrine with a slab	1.4	1.0
Covered pit latrine without a slab	1.6	1.0
Uncovered pit latrine with a slab	1.9	1.0
Uncovered pit latrine without a slab	2.2	1.0
No facility	1.8	1.0
Other	2.2	1.0
No radio	0.4	1.0
No bicycle	0.3	1.0
Standard Deviation (District Intercept)	0.7	1.0
N Households	15645	
Nagelkerke R^2 (without random intercept)	0.34	
Specificity (without random intercept)	0.78	
Sensitivity (without random intercept)	0.78	
Loo index	14582.8	

Note: * Mean estimate (Bayesian model). ** Values closer to 1 mean that the MCMC chains have good mixing

As explained above, information on household size and characteristics of the household head were not strictly comparable between Census and survey data and were therefore not included. Moreover, household size and information on the head of household, such as whether they could read or write, their sex at birth or whether they were a paid employee did not improve the fit of the model.

6.2.3 **Stage 3:** Predicting and Validating the Multidimensional Poverty Estimates by Applying the Best Model Found in Step 2 to the 2019/20 Census Data

We then applied Model 3 (fitted on 2016/17 UNHS data) to the 2014 Uganda Census and checked the model prediction by comparing it to the direct estimates from the UNHS. Because of the recalibration carried out on the 2016/17 UNHS, we then checked the MD child poverty model prediction by comparing it with the direct regional estimates from the recalibrated UNHS. There were some minor differences between the direct estimates from the UNHS and the model estimates using the Census, but they were all within the margin of error of the UNHS estimates. The UNHS model was then applied to the Census data to produce Small Area Estimates of multidimensional poverty at the sub-county and, for Kampala, parish level.

6.2.4 **Stage 4:** Adjusting the 2014 Population Census Estimates to the 2019/20 UNHS

Finally, the 2014 SAE estimates were updated so that they matched the 2019/20 regional estimates presented in Table 4.4 (The Geography of Child Poverty in Uganda). This ensured that the estimates presented in the maps below aligned with the overall magnitude of regional MD poverty rates presented in previous chapters. The alignment was achieved by simply multiplying the predicted sub-county and parish 2014 MD child poverty rates

(the Small Area Estimates) by the change in regional MD child poverty between 2014 and 2019/20. Although it is unlikely that all sub-counties within the same region will have experienced the same proportional increases or decreases in MD poverty, this simple adjustment preserved the estimated within-region variation, which is the main focus of Small Area Estimation.

6.3 DISTRICT AND COUNTY LEVEL MULTIDIMENSIONAL CHILD POVERTY

The results show that, in general, very high multimensional child poverty is recorded in districts located in poor sub-regions. These include Acholi, Lango, Karamoja, Teso, Bukedi, Kigezi, Ankole and Busoga districts. The highest multidimensional child poverty is recorded in the following districts in Acholi (Pader-91.2%, Agago-90.9%, Amuru-90.7%, Lamwo-90%). Other districts with high multidimensional child poverty are in Karamoja (Napak-85.4%, Kaabong-83.6%, Nakapiripirit-80.1%). The report also finds that there is significant heterogeneity within districts. For instance, the multidimensional child poverty in Arua district is 39.7%, but Madi Okollo County has a poverty rate of 42.3%, and Arua Municipality County has 24.9%.

6.4 SUB COUNTY-LEVEL MULTIDIMENSIONAL CHILD POVERTY ESTIMATES

Figure 6.3 below shows the subcounty-level MD child poverty estimates, shaded in different colours to show areas with high and low levels of MD poverty. The darker the area, the higher the prevalence of MD child poverty. These maps confirm that the highest rates of poverty are largely concentrated in the North and North East of Uganda (above 70%) and that, in general, the lowest rates of poverty are in Kampala.

However, the estimates also suggest that there are pockets of high MD child poverty in subregions that have lower regional MD child poverty, such as Toro, Buganda North and Ankole.

Within Kampala, considerable variation can be observed at the parish level (see Figure 6.4). The central area of Kampala shows very low poverty rates. In the north and in the South East of Kampala, poverty rates are several times greater than in the central area. Whilst, on average, Kampala has the lowest poverty rates in Uganda, it is important to note that the non-central parishes have much higher poverty rates.

FIGURE 6.3: **Subcounty Level Estimates of Percentage of Children in MD Child Poverty in 2019/20**

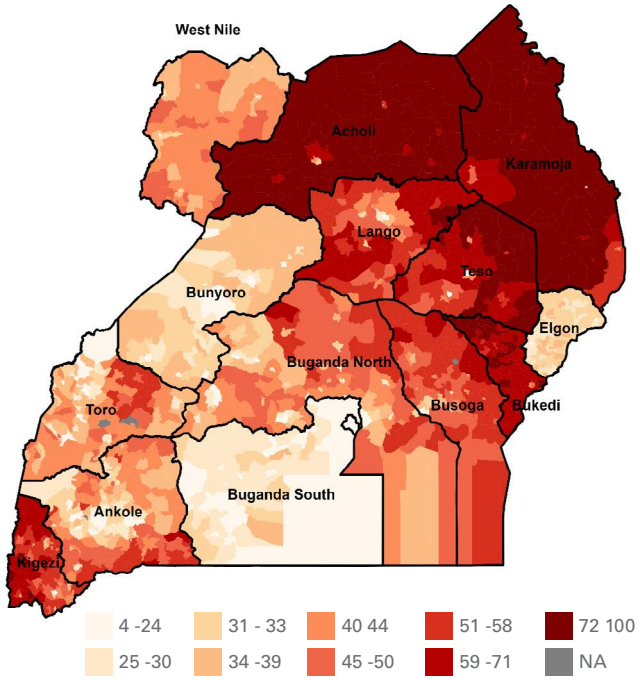
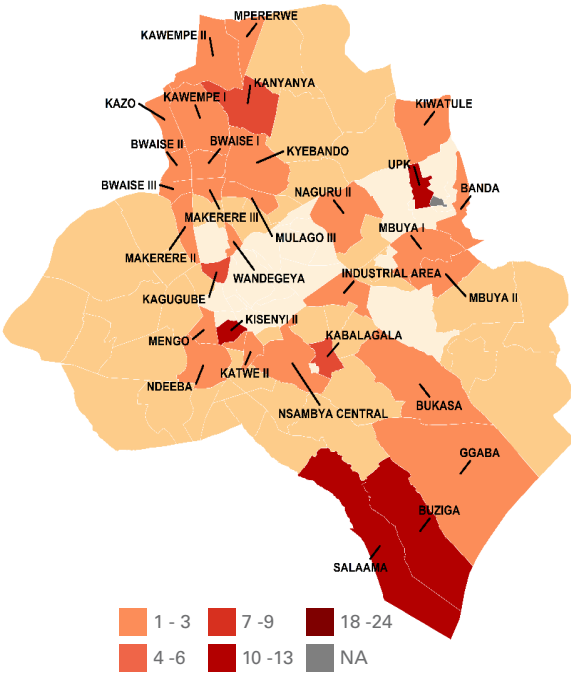


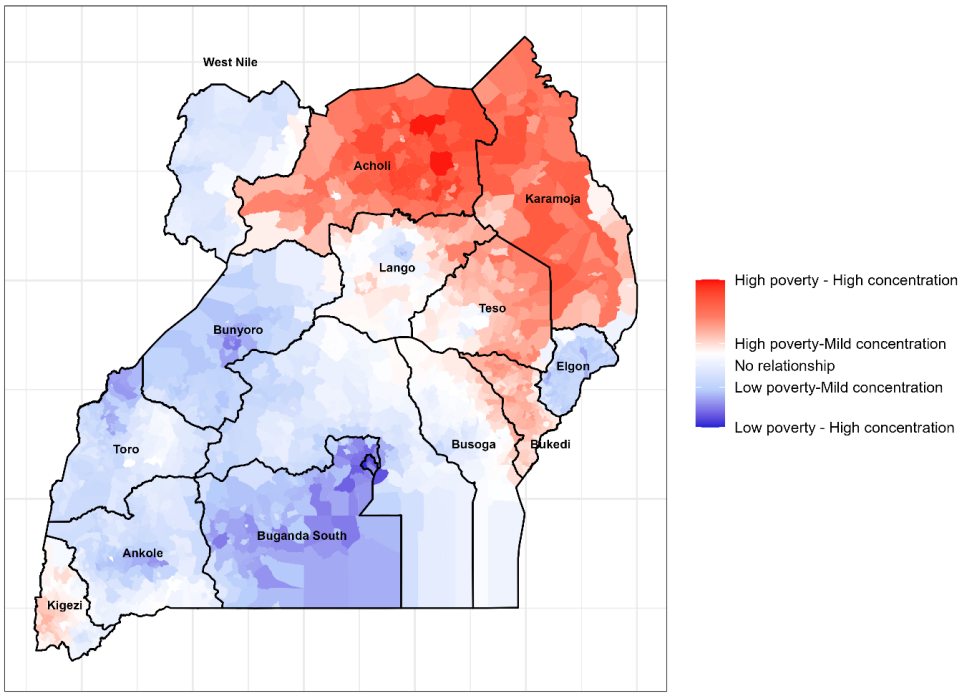
FIGURE 6.4: **Kampala Parish Level Estimated Percentage of Children in MD Child Poverty in 2019/20**



6.4.1 Spatial Concentration of MD Child Poverty

The subcounty-level maps suggest that MD poverty is clustered in Uganda, i.e. high and low poverty rates tend to concentrate in certain areas. The Global Moran's I statistic can provide a formal assessment of the geographical pattern as they are a measure of spatial concentration, i.e., how alike are neighbouring areas. The more areas next to each other have similar poverty rates, the closer the Global Moran's I will be to 1. Both 2016 and 2019/20 estimates show a Moran's I of 0.8, suggesting a high level of spatial clustering at the sub-county level. However, this provides only limited information as it does not show where exactly high or low rates of poverty are concentrated. One way to assess the specific clusters or hot spots of high or low poverty rates is by using the Local G statistics (Anselin, 1995). Figure 6.5 (below) plots the significance tests of the Local G statistics, i.e. the areas where high or low concentrations of poverty are grouped into statistically significant clusters of geographic areas. The map shows that high poverty rates (shown in red on the map) are concentrated across the sub-counties in the North and North East of Uganda, although the Bukedi area and the Kigezi area in the South West also exhibits some level of high MD poverty clustering. The area surrounding Kampala and the central and western sections of Buganda South also show a large cluster of sub-counties with low MD poverty rates (shown in blue on the map).

FIGURE 6.5: **Local G Statistics, Child Poverty at Subcounty Level Estimates**



6.4.2 Local Association Between Poverty and Key Socio-Economic Variables

The maps in previous sections show the geography of MD child poverty in Uganda. These spatial patterns of poverty in Uganda are consistent with results from other countries, which also have high and low-poverty areas clustered together (CONEVAL, 2011; Davey et al, 2001; Dorling et al, 2007; Nájera et al, 2019). This pattern is unlikely to be random, and it often mirrors policies which affect the geographical distribution of public services and the distribution of economic opportunities (Dorling et al., 2010; Venables, 2005). Therefore, it is important to describe the relationship between MD poverty and key variables like household head illiteracy, household head participation in paid work, distance to public health facilities and to public primary schools. This also helps further validate the small area estimates provided in this chapter, as the strong positive association between education, paid work and MD poverty is well-established, while analysis of the correlation between poverty and health and educational services provides important messages for policymakers.

FIGURE 6.6: **Distribution of Sub-County Rates of Key Socio-Economic and Public Provision Variables, Uganda 2014 Census**

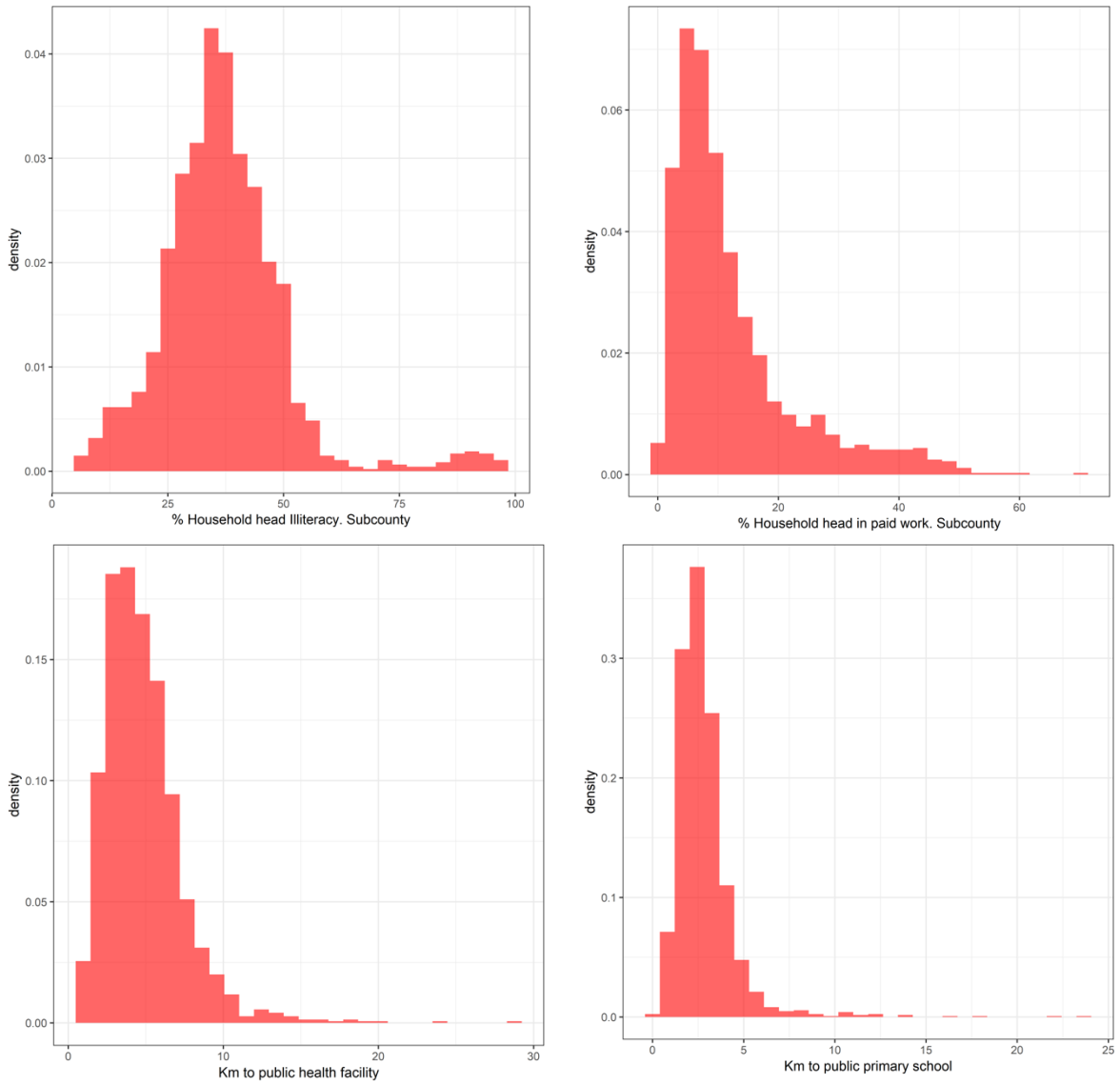


Figure 6.6 (above) plots the distribution, at subcounty-level, of the percentage household head illiteracy, the percentage of household head participation in paid work, the distance in km to public health facilities and to public primary schools. None of these variables has a compact distribution, indicating that these phenomena vary considerably across sub-counties. The question is how the spatial distribution of these important phenomena relates to the geographic distribution of MD child poverty.

In poverty research, most of the studies about the association between the chances of experiencing poverty and several socio-economic variables tend to focus on average or aggregate relationships. In these types of analyses, there is often an underlying assumption that the effect of increasing education in a population will have the same effect everywhere (i.e., the same effect in all areas of the country). However, this may not be true, as policies and expenditures might have different effects on child poverty in different parts of the country. Hence, it is important to have an idea of the varying relationship between different key variables and child poverty. To estimate such local or spatial relationship, local correlations must be computed using Geographically Weighted correlations, which means allowing a correlation coefficient to vary across space (Brunsdon et al, 1996).

FIGURE 6.7: **Correlation Between MD Child Poverty in 2019/20 and Census 2014 Direct Estimates of Rates of Illiteracy, Percentage of Household Heads in Paid Work, Distance to Health Facility and Primary Schools**

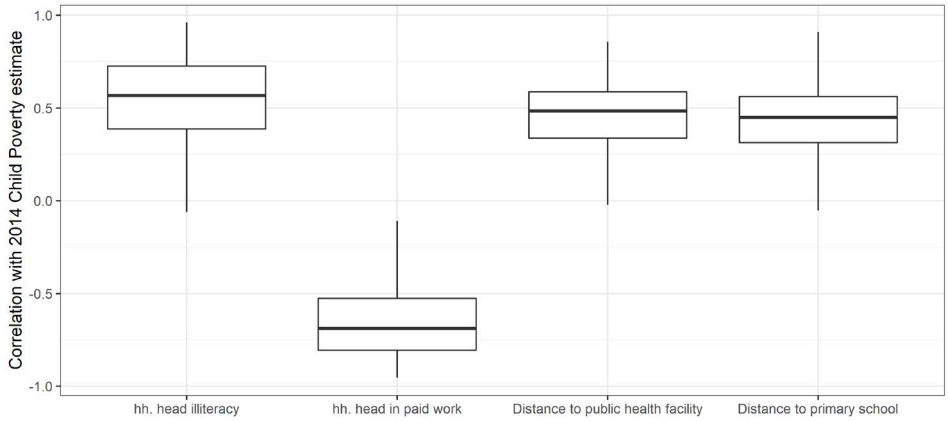


Figure 6.7 (above) shows the distribution across sub-counties of the spatial association (in the form of geographically weighted correlation coefficients) between the sub-county prevalence of estimated MD child poverty and Census sub-county estimates of education, paid work and distance to health and primary school. The first two boxplots show that sub-counties with higher levels of child poverty generally have higher rates of household head illiteracy and a smaller percentage of household heads engaged in paid work. Although there is some spatial variation (shown by the width of the boxplot box), the association tends to be consistent across Uganda and reflects well-known relationships between these two variables. The third and fourth boxplots show that, the higher the estimated MD child poverty sub-county rate, the further away households have to travel to reach public health facilities and primary schools.

This suggests that, on average, in Uganda, the areas with the greatest health and educational needs are also those with the worst health services availability – an example of the 'Inverse Care Law' (Tudor, 1971).

6.5 CONCLUSION

This chapter presented the first small area estimates of MD child poverty in sub-district areas in Uganda, based on the 2019/20 UNHS and 2014 Uganda Census data. The estimates were produced using the hierarchical Bayesian estimator. SAE involves making several assumptions about the quality of the data, the comparability between data sources and the plausibility of the model underlying the prediction. Therefore, there are many sources of error that affect the uncertainty around the estimates for a given small area. For future exercises, reducing differences in how key variables are measured in surveys and Census and undertaking key surveys like the UNHS shortly before or after the Census will lead to better small area estimates of MD child poverty.

Despite these limitations, these estimates provide some key messages for understanding the spatial distribution of MD child poverty in Uganda. MD child poverty in Uganda has a clear geographical distribution and concentration. The areas in the north, particularly in the North East, tend to have very high multidimensional poverty rates (above 60%). Small area estimates, however, also show that there are pockets of high MD child poverty in subregions that do not appear to have very high poverty rates at the sub-region level. Regions like Kigezi and Bukedi also show a high level of local MD child poverty clustering (i.e., concentration).

Kampala has very low MD child poverty rates relative to the rest of the country. The prevalence rate is on average 8% and is also low in the surrounding sub-counties in Buganda South. However, the distribution of poverty within Kampala is not homogeneous, and there are parishes with child poverty rates of up to three times higher than the average.

The geographical analysis shows that multidimensional child poverty is highly correlated, at a spatial level, with high illiteracy rates and low participation in paid work. Finally, the areas with high rates of MD child poverty are also those where children have to travel further to reach health care facilities and primary schools.

CHAPTER 7

CONCLUSIONS AND POLICY RECOMMENDATIONS

This report has presented the first analyses of the extent and nature of MD child poverty in Uganda. These results are based upon rigorous scientific evidence from the consensual deprivation question module included in 2019/20 to develop a valid and reliable measurement of multidimensional poverty for both adults and children.

According to the national (monetary) poverty line, 23% of Uganda's children are poor. However, our results show that almost half (44%) of children in Uganda suffer from MD poverty. Children are considered to be multidimensionally poor if they live in a household with a low expenditure and are multiply deprived of seven or more of the things they need due to a lack of money.

The parents, carers and adults of Uganda believe that child poverty is about more than mere subsistence and that children have both material and social needs, such as access to health services when sick, a social and family life, clean and safe drinking water, housing which is not squalid and overcrowded, adequate clothing and regular meals with nutritious food and for school-age children the things they need to participate in school and do their homework. These are not unreasonable things for parents to want for their children but, unfortunately, the majority of parents simply cannot afford to provide their children with the basic things they need to be healthy and happy and participate fully in Ugandan society.

The consensual deprivation question module provides direct measures of the possessions, services and activities that the large majority of parents want for their children. The results speak for themselves about the situation of Ugandan children.

two thirds of children

do not have their own bed to sleep in, and six out of ten do not have their own blanket.

60%

of children do not have two pairs of shoes and over half have no new clothes – just handed down or second-hand clothes

7 IN 10

children do not have any books at home are suitable for their age

MORE THAN **40%**

of children do not get three meals a day – hunger and malnutrition are widespread and almost a third of young children are stunted.

two thirds of children

of school-age children do not have a chair to sit on or a desk or table to write on to do their homework

1 IN 3

children cannot visit a health facility or get the medicine they need when they are sick

3 IN 10

children don't have the soap and toiletries they need to keep themselves clean

The economics of child poverty are very simple and are entirely concerned with redistribution. Where sufficient resources are redistributed from adults to children, there is no child poverty. Where insufficient resources are redistributed from adults to children, child poverty is inevitable (Gordon, 2004). Children cannot and should not generate the resources they need to escape from poverty. This is the job of adults. Children should be spending their time playing and learning, not working at paid labour. It is of course, the role of parents to provide their children with the things they need, but where parents are too poor to do this, it is the role of the state to intervene and protect children from poverty. The Constitution of Uganda provides all adults and children with economic and social rights and requires the Government to help poor children to fulfil their rights.

There is no need for any child in the 21st Century to starve, without clean drinking water, toilets or access to basic health care and education. Child poverty is neither an 'Act of God' nor 'inevitable': it is a political choice. What is usually lacking is not sufficient money but the political will to spend it on alleviating child poverty.

Despite the fact that children are the majority of the Ugandan population, they lack political influence and their needs are often ignored both in Uganda and in other countries. Minujin et al (2006) reviewed the literature on the concept and measurement of child poverty and found that:

> *'there is a lack of consideration of children's issues in the debate on poverty. The lack of visibility has negative implications for anti-poverty strategies, which seldom consider that children and their rights are central to their design and implementation.'*

Children are, unfortunately, sometimes viewed as 'victims of poverty' rather than citizens with agency whose basic human rights have been ignored.

POLICY RECOMMENDATIONS

It is clear from the results presented in this report that a comprehensive child poverty eradication plan could include the following aims:

- Increasing the income of poor families with children.
- Ensure that, as far as possible, children living in low-income families are not materially and socially deprived.
- Ensure that children are not malnourished and food insecure.
- Provide access to safe drinking water, sanitation and electricity.
- Provide universal health coverage for children, particularly for children under five years old.
- Reduce the hidden costs of education and provide free school meals.
- Help young people participate effectively in education and training – including through the provision of special grants where needed to cover education-related costs.
- Promote and facilitate employment for parents in low-income families.
- Help low-income parents with the skills needed to secure employment and improve agricultural production.
- Help young people take advantage of employment opportunities. This is of critical importance as increasing numbers of children reach working age.
- Protect children from harmful work.
- Support the parenting of children.
- Encourage children's participation in cultural, sporting and leisure activities.
- Help young people participate effectively and responsibly in the life of their community.
- Ensure that all children grow up in decent housing.
- Ensure that all children grow up in safe and cohesive communities.

Uganda has made tremendous progress over the past hundred years (primarily in increasing life expectancy) and has ambitious plans to reduce and eventually eradicate extreme poverty during the 21st Century. However, there is a grave danger of wishing for noble ends but not providing the necessary means.

It is clear, from the findings of this research, that many Ugandan children are hungry and malnourished and are therefore susceptible to infectious disease and often unable to concentrate at school. Providing school meals (breakfast and/or lunch) will increase school attendance and educational attainment and improve poor children's health. This policy has been successfully implemented in many countries, and it is relatively low-cost and highly effective (Bundy et al., 2009; Drake et al., 2016; WFP, 2013;). Similarly, providing adequate and safe water, sanitation and hygiene (WASH) facilities and education in schools (e.g., toilets, soap, etc.) has been shown to improve both the health and educational attainment of children (Chard et al., 2018; Freeman, 2011; Trinies et al., 2017). Similarly, there are consistent findings that children living in certain sub-regions, particularly in Northern Uganda (e.g., parts of Acholi Karamoja and West Nile), suffer from very high levels of deprivation. Area-based anti-poverty programmes can complement individual-level programmes aimed at reducing child poverty.

In particular, the Government of Uganda spends less of its government budget on social protection measures aimed at helping poor adults and children than virtually any country in Africa or the rest of the world. Unlike virtually all other countries, Uganda failed to increase pro-poor spending during the COVID-19 pandemic, and this is one of the reasons why both monetary and multidimensional child poverty increased so rapidly in just a few months in 2020. The Ugandan Government's public health response to the pandemic was exemplary (Lancet COVID-19 Commissioners, 2020) and amongst the best in the world. But, the Government's response to protecting poor children from the economic consequences of the pandemic was inadequate and amongst the worst in the world. This was one of the reasons why child multidimensional poverty in Uganda increased by 5% and child monetary poverty increased by 7% in 2020.

The people and Government of Uganda are united in their desire to see an end to child and adult poverty in all its dimensions and manifestations. Suitable, valid and reliable poverty measures are needed to target resources accurately and help develop effective and efficient anti-poverty policies that command widespread public support. Without valid and reliable poverty measures, monitoring whether anti-poverty policies and programmes are working effectively and whether public monies are being well-spent or wasted is impossible.

Uganda Vision 2040 aims to reap the demographic dividend as the children of today become economically productive adults and transform "*Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years*". In order to achieve this vision, the importance of rapidly reducing and eventually eradicating child poverty cannot be overstated.

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CHAPTER 8
REFERENCES

Africa Child Policy Forum (2008) *The African Report on Child Wellbeing 2008: How child-friendly are African Governments?* Addis Ababa, Ethiopia, ACPF.

Africa Child Policy Forum (2018) *The African Report on Child Wellbeing: Progress in the child-friendliness of African governments*. Addis Ababa, Ethiopia, ACPF.

Africa Child Policy Forum (2020a) *The African Report on Child Wellbeing: How friendly are African governments towards girls?* Addis Ababa, Ethiopia, ACPF.

Africa Child Policy Forum (2020b*) Uganda: How friendly is the government towards girls?* Addis Ababa, Ethiopia, ACPF.

Appleton, S., Emwanu, T., Kagugube, J. and Muwonge, J. (1999) *Changes in Poverty in Uganda, 1992-1997. WPS/99.22*, Centre for the Study of African Economies, University of Oxford. https://ora.ox.ac.uk/objects/uuid:ca8f0eec-140c-4a9f-8bf7-81f4befe7a53/download_file?safe_filename=9922text.pdf&type_of_work=Working+paper

Appleton, S. (2001) Changes in Poverty and Inequality. In Collier, P. and Reinnikka, R. (eds*) Uganda's Recovery: The Role of Farms, Firms and Government*, Washington DC, World Bank, pp 83-121.

Appleton, S. (2003) Regional or National Poverty Lines: The Case of Uganda in the 1990s. *Journal of African Economies*, 12, 4, 598-624.

Asankha, P. and Takashi, Y. (2011) Impacts of Universal Secondary Education Policy on Secondary School Enrollments in Uganda. *Journal of Accounting, Finance and Economics*, 1, 1, 16-30.

Barro, R. and Lee, J.W. (2013) A New Data Set of Educational Attainment in the World, 1950-2010. *Journal of Development Economics*, 104, 184-198. Ver 2.2 June 2018 http://www.barrolee.com/

Basu, A. (2002) Why Does Education Lead to Lower Fertility? A critical review of some of the possibilities. *World Development*, 30, 1779-90.

Bequele, A. (2018) *African governments should make long-term investments in children, youth: report*. http://www.xinhuanet.com/english/africa/2018-11/03/c_137577619.htm

Bierbaum, M., Schildberg, C. and Cichon, M. (2017) *Social Protection Floor Index 2017: Update and Country Studies*. Berlin. Friedrich-Ebert-Stiftung.

Black, R., Morris, S. and Bryce, J. (2003) Where and Why Are 10 Million Children Dying Every Year? *Lancet*, 361, 2226-34.

Black, R.E., Victora, C.G., Walker, S.P., Bhutta, Z.A., Christian, P., de Onis, M, et al, (2013) Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet*, 382, 427–451. http://dx.doi.org/10.1016/S0140-6736(13)60937-X

Boltvinik, J., Chakravarty, S., Foster, J. Gordon, D. Hernández Cid, R., Soto de la Rosa, H. and Mora, M. (2010) *Medición Multidimensional de la Pobreza en* México (Multidimensional Measurement of Poverty in Mexico – in Spanish). México, D.F: El Colegio de México and Consejo de Evaluación de la Política de Desarrollo Social.

Booth, C. (1902) *Life and Labour of People in London. Poverty Series Vol. 1*. Macmillan and Co. Limited: London

Bundy, D.A.P., Burbano, C., Grosh, M., Gelli, A., Jukes, M., and Drake, L. (2009) *Rethinking School Feeding: Social Safety Nets, Child Development, and the Education Sector*. Washington, DC: World Bank.

Chapman, D.W, Burton, L and Werner, J. (2009) Universal secondary education in Uganda: The headteachers' dilemma. *International Journal of Educational Development*, 30, 1, 77–82.

Chard, A.N., Trinies, V., Moss, D.M., Chang, H.H., Doumbia, S., Lammie, P.J. et al. (2018) The impact of school water, sanitation, and hygiene improvements on infectious disease using serum antibody detection. *PLOS Neglected Tropical Diseases*12(4) e000641 https://doi.org/10.1371/journal.pntd.0006418

CONEVAL (2010) *Methodology for Multidimensional Poverty Measurement in Mexico*. Mexico City, CONEVAL.

de Onis, M., Dewey, K.G., Borghi, E., Onyango, A.W., Blössner, M., Daelmans, B., Piwoz, E and Branca, F. (2013) The World Health Organization's global target for reducing childhood stunting by 2025: rationale and proposed actions. *Maternal & Child Nutrition*. 9 (Suppl 2): 6-26.

Cronbach LJ (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*. 16, 3, 297–334.

Cronbach, LJ, & Meehl, PE. (1955). Construct validity in psychological tes*ts. Psychological Bulletin*, 52, 4, 281-302.

Doyal, L. and Gough, I. (1991) *A Theory of Human Need*. London: Macmillan.

Drake, L., Woolnough, A., Burbano, C., Bundy, D. (2016) *Global School Feeding Sourcebook: Lessons from 14 Countries*. London: Imperial College Press.

U.N. Economic & Social Council [ECOSOC] (1991), Committee on Economic, Social & Cultural Rights, *Report on the Fifth Session, Supp. No. 3, Annex III*, 10, U.N. Doc. E/1991/23 (1991) [Often referred to as General Comment No. 3].

ECLAC/DGEC (Economic Commission for Latin America and the Caribbean/Dirección General de Estadística y Censos del Uruguay) (19*88), La heterogeneidad de la pobreza: una aproximación bidimensional* (LC/MVD/R.12/Rev.1.): Montevideo.

Fifita, V. (2016) *Child and Adult Poverty in a Small Island Developing State: A Case Study of Tonga*. PhD Thesis, University of Bristol.

Freeman, M.C. (2011) *The impact of a school-based water, sanitation and hygiene program on health and absenteeism of primary school children.* PhD thesis, London School of Hygiene & Tropical Medicine. DOI: https://doi.org/10.17037/PUBS.00682433

Giavarina, D. (2015). Understanding Bland Altman analysis. *Biochemia medica*, 25, 2, 141–151. https://doi.org/10.11613/BM.2015.015

Gordon, D. (2000) 'The Scientific Measurement of Poverty: Recent Theoretical Advances'. In Bradshaw, J. and Sainsbury, R. (Eds) *Researching Poverty*, Aldershot, Ashgate. pp.37-58.

Gordon, D. (2004) 'Poverty, Death & Disease'. In Hillyard, P., Pantazis, C., Tombs, S. and Gordon, D. (Eds) (2004) *Beyond Criminology: Taking Harm Seriously*. London, Pluto. pp. 251-266.

Gordon, D. (2006) 'The concept and measurement of poverty'. In Pantazis, C., Gordon, D. and Levitas, R. (Eds) *Poverty and Social Exclusion in Britain: The Millennium Survey*. Bristol, Policy Press. pp. 29-70.

Gordon, D. (2010) 'Metodología de Medición Multidimensional de la Pobreza para México a partir del Concepto de Privación Relativa' (Methodology for Multidimensional Poverty Measurement in Mexico Using the Concept of Relative Deprivation – in Spanish). In Boltvinik, J., Chakravarty, S., Foster, J. Gordon, D. Hernández Cid, R., Soto de la Rosa, H. and Mora, M. (coord.), *Medición Multidimensional de la Pobreza en México* México, D.F: El Colegio de México and Consejo de Evaluación de la Política de Desarrollo Social. pp. 401-497.

Gordon, D. and Pantazis, C. (Eds) (1997) *Breadline Britain in the 1990s*. Aldershot, Ashgate.

Gordon, D. and Nandy, S. (2012) 'Measuring child poverty and deprivation'. In Minujin, A. and Nandy, S. (Eds) *Global Child Poverty and Well-Being: Measurement, Concepts, Policy and Action*. Bristol, Policy Press. pp 57-101.

Gordon, D. and Nandy, S. (2016) 'Policy relevant measurement of poverty in low, middle and high income countries'. In Wright, G., Braathen, E., May, J. and Ulriksen. M. (eds) *Poverty and Inequality in Middle Income Countries: Policy Achievements, Political Obstacles*. London, Zed.

Gordon, D., Adelman, A., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S., Townsend, P. and Williams, J. (2000), *Poverty and social exclusion in Britain*. York, Joseph Rowntree Foundation.

Gordon, D., Nandy, S., Pantazis, C., Pemberton, S. and Townsend, P. (2003) *Child Poverty in the Developing World*, Policy Press: Bristol.

Guillén, Y.B. (2017) *Multidimensional poverty measurement from a relative deprivation approach: a comparative study between the United Kingdom and Mexico*. PhD Thesis, University of Bristol.

Guio, A-C, Gordon, D. and Marlier, E. (2012) *Measuring material deprivation in the EU indicators for the whole population and child-specific indicators*. Luxembourg: Publications Office of the European Union.

Guio, A-C, Gordon, D., Marlier, E., Fahmy, E., Nandy, S. and Pomati, M. (2016) Improving the measurement of material deprivation at EU level. *Journal of European Social Policy*, 26, 3, 219-333.

Guio, A-C, Gordon, D. Catalan, H.N. and Pomati, M, (2017) *Revising the EU material deprivation variables*. Luxembourg: Publications Office of the European Union.

Guio, AC, Gordon, D, Marlier, E, Catalan, H.N. and Pomati, M, (2018) Towards an EU measure of child deprivation. *Child Indicators Research*. 11, 3, 835–860.

Heckman, J.J. (2006) Skill Formation and the Economics of Investing in Disadvantaged Children. *Science*, 312, 1900-1902.

Heckman, J.J. and Masterov, D.V. (2007) The Productivity Argument for Investing in Young Children. *Review of Agricultural Economics* 29, 3, 446-493.

ILO (2012). *Recommendation Concerning National Floors of Social Protection (No. 202)*. 101st Session, Geneva, 14 June 2012: International Labour Conference.

ILO (2017) *World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals*. Geneva, International Labour Organization.

Jellema, J., Lustig, N., Haas, A. and Wolf, S. (2016) *The impact of taxes, transfers, and subsidies on inequality and poverty in Uganda*. London, International Growth Centre S-43304-UGA-1.

Kaijage, F. and Tibaijuka, A. (1996) *Poverty and social exclusion in Tanzania*. Research Series No.109. Geneva: IILS.

Kaztman, R. (1999) *Activos y estructuras de oportunidades: Estudios sobre las raíces de la vulnerabilidad social en Uruguay* (LC/MVD/R.180), Economic Commission for Latin America and the Caribbean (ECLAC): Montevideo.

Lancet CVID19 Commissioners (2020) Lancet COVID-19 Commission Statement on the occasion of the 75th session of the UN General Assembly. *Lancet*, 396, 1102-1124.

Lansdown, G. (1998) 'The Convention: history and impact' in L. Carlson, M. Mackeson-Sandbach and T. Allen (Eds) *Children in Extreme Situations*. Working Paper Series, LSE Development Studies Institute: London. http://www.lse.ac.uk/internationalDevelopment/pdf/WP/WP05.PDF

Lawson, D., McKay, A., and Okidi, J. (2006) Poverty persistence and transitions in Uganda: a combined qualitative and quantitative analysis. *Journal of Development Studies*, 42, 7, 1225–1251.

Leulescu, A. and Agafitei, M. (2013) *Statistical matching: a model based approach for data integration*, Eurostat methodolgies and working papers.

Mack, J. and S. Lansley (1985) *Poor Britain*. London: Allen and Unwin.

Margini, F., Pattnaik, A., Jordanwood, T., Nakyanzi, A. and Byakika, S. (2020) *Case Study: The Initial COVID-19 Response in Uganda*. Washington, DC: ThinkWell and Ministry of Health Uganda.

Mtapuri, O. (2011). Developing an asset threshold using the consensual approach: Results from Mashonaland West, Zimbabwe. *Journal of International Development*, 23, 29–41.

Ministry of Finance, Planning and Economic Development (2000a) *Poverty Reduction Strategy Paper, Uganda's Poverty Eradication Action Plan, Summary and Main Objectives*. Kampala: Ministry of Finance, Planning and Economic Development.

Ministry of Finance, Planning and Economic Development (2000b) *Uganda Participatory Poverty Assessment Report*. Kampala: Ministry of Finance, Planning and Economic Development.

Ministry of Finance, Planning and Economic Development (2002) *Uganda Second Participatory Poverty Assessment Report: Deepening the Understanding of Poverty*. Kampala: Ministry of Finance, Planning and Economic Development.

Ministry of Finance, Planning and Economic Development (2012) *Poverty Status Report 2012: Reducing vulnerability, equalising opportunities and transforming*. Kampala: Ministry of Finance, Planning and Economic Development.

Ministry of Finance, Planning and Economic Development (2014) *Poverty Status Report 2014: Structural Change and Poverty Reduction in Uganda*. Kampala: Ministry of Finance, Planning and Economic Development.

Minujin, A., Delamonica, E., Davidziuk, A. and Gonzalez, E. (2006). The definition of child poverty: A discussion of concepts and measurements. *Environment and Urbanization*. 18, 481-500.

Minujin, A. and Nandy, S. (2012) (Eds) *Global Child Poverty and Well-Being: Measurement, Concepts, Policy and Action*. Bristol, Policy Press.

Misinde, C. (2015) Child Poverty in Uganda: Is Orphanhood Enough Explanation? PhD Thesis, Queen's University Belfast.

Misinde, C. (2017) "An Intrinsic characteristics and Value of Poverty Indicators": a New Method for Deriving Child Living Condition Scores and Poverty, in Uganda. *Child Indicators Research*, 10, 1, 141–170.

Nakalembe, C. (2018) Characterizing agricultural drought in the Karamoja subregion of Uganda with meteorological and satellite-based indices. *Natural Hazards*. 91. 10.1007/s11069-017-3106-x.

Nandy, S. and Main, G. (2015) *CROP Briefing: The Consensual Approach to Child Poverty Measurement*, November 2015, Bergen: Comparative Research on Poverty. https://www.crop.org/viewfile.aspx?id=825

Nandy, S and Pomati, M. (2015) Applying the consensual method of estimating poverty in a low income African setting, *Social Indicators Research*, 124(3):693-726

National Planning Authority (2010) *National Development Plan, 2005/11-2014/15*. Kampala, Uganda: National Planning Authority.

National Planning Authority (2013) *Uganda Vision 2040*. Kampala, Uganda: National Planning Authority.

National Planning Authority (2014). *Harnessing the Demographic dividend – Accelerating socioeconomic transformation in Uganda*. Kampala, Uganda: National Planning Authority.

National Planning Authority (2015) *Second National Development Plan (NDPII), 2015/16-2019/20*. Kampala, Uganda: National Planning Authority.

National Planning Authority (2020) *Third National Development Plan (NDPIII) 2020/21 – 2024/25*. Kampala, Uganda: National Planning Authority.

National Population Council (2018a) *State of Uganda Population Report 2018*. Kampala, NPC

National Population Council (2018b) *Harnessing Uganda's Demographic Dividend: Evidence From National Transfer Accounts*. Kampala, NPC.

Nino-Zarazua, M., Barrientos, A., Hulme, D., and Hickey, S. (2010) *Social Protection in Sub-Saharan Africa: Will the green shoots blossom?* Brookings World Poverty Institute Working Paper 116, April 2010.

Niño-Zarazúa, M., Barrientos, A. and Hulme, D. and Hickey, S. (2012) Social Protection in Sub-Saharan Africa: Getting the Politics Right. *World Development,* 40, 163–176.

Noble, M., Ratcliffe, A. and Wright, G. (200*4) Conceptualizing, defining and measuring poverty in South Africa: An argument for a consensual approach*. Oxford: Centre for the Analysis of South African Social Policy, University of Oxford.

Noble, M., Wright, G., Magasela, W. K. and Ratcliffe, A. (2008) Developing a democratic definition of poverty in South Africa. *Journal of Poverty*, 11, 117–141.

Nyqvist, M. B., A. Guariso, J. Svensson, et al., (2019) "Reducing Child Mortality in the Last Mile:

Experimental Evidence on Community Health Promoters in Uganda" *American Economic*

Journal: Applied Economics 2019, 11(3): 155–192.

Nteziyaremye, A. and Mknelly, B. (2001) *Mali poverty outreach study of the Kafo Jiginew and Nyesigiso credit and savings with education programs*. Davis, C.A.: Freedom from Hunger.

Office of the Prime Minister (OPM) (2011) *Peace, Recovery and Development Plan for Northern Uganda (PRDP): Phase 2 July 2012 – June 2015*. Kampala, Uganda.

Okidi, J. and Mugambe, G. K. (2002) An overview of chronic poverty and development policy in Uganda. *Chronic Poverty Research Centre Working Paper* (11), University of Manchester.

Owori, M. (2018) *Pro-poor analysis of the 2018/19 Uganda budget how are government's spending decisions likely to impact poor people?* Bristol, Development Initiatives.

Owori, M. (2021) *Domestic financial flows in Uganda before and during Covid-19.* Bristol, Development Initiatives. https://devinit.org/resources/domestic-financial-flows-uganda-covid-19/

Paasonen, K. and Urday, H, (2016) Youth Bulges, Exclusion and Instability: The Role of Youth in the Arab Spring. *Conflict Trends* 03/2016.

Pantazis, C, Gordon, D. and Levitas, R. (Eds) (2006) *Poverty and Social Exclusion in Britain*. Bristol, The Policy Press.

Pemberton, S., Gordon, D., Nandy, S., Pantazis, C. and Townsend, P. (2005) 'The relationship between child poverty and child rights: the role of indicators'. In Miujin, A., Delamonica, E. and Komarecki, M. (Eds) *Human Rights and Social Policies for Children and Women*. The New School, New York, pp. 47-62.

Pemberton, S., Gordon, D., Nandy, S., Pantazis, C. and Townsend, P. (2007) Child Rights and Child Poverty: Can the International Framework of Children's Rights Be Used to Improve Child Survival Rates? *PLoS Medicine*. 4(10): e307. Published online 2007 October 23. doi: 10.1371/journal.pmed.0040307

Pereznieto, P., Walker, D., Villar, E. and Alder, H. (2011) *Situation analysis of children and poverty in Uganda: Voices of children*. London, Overseas Development Institute.

Pereznieto, P., Walker, D., Villar, E. and Alder, H. (2014). *Child and poverty and deprivation in Uganda: Voices of children*. Kampala: Ministry of Gender, Labour and Social Development; UNICEF Uganda; Overseas Development Institute.

Piachaud, D. (1981) Peter Townsend and the Holy Grail, *New Society* 10, September.

Pomati, M. and Patsios, D. (2018) *The distribution and dynamics of economic and social well-being in the UK:An analysis of recession using multidimensional indicators of living standards (MILS)*. London, Nuffield Foundation https://nuffieldfoundation.org/sites/default/files/files/Patsios%2042858%20-%20Nuffield_EAD_MILS_SummaryFindings_Nov2018_final.pdf

Ravallion, M. and Bidani, B. (1994) How robust is a poverty line? *World Bank Economic Review* 8, 1, 75-102.

Republic of Uganda (1997) *Poverty Eradication Action Plan: A National Challenge for Uganda*, Volume I. Kampala, Ministry of Planning and Economic Development.

Sandhar, J.K. and Geoffrey, O. (2022) *The response to COVID-19 in Northern Uganda should be disability-inclusive.* Policy Report 81, University of Bristol. http://www.bristol.ac.uk/media-library/sites/policybristol/briefings-and-reports-pdfs/2022/PolicyBristol_PolicyReport81_Sandhar_NorthernUganda_Covid19.pdf%20final.pdf

Saunders, P. and Wong, M. (2012) *Promoting Inclusion and Combating Deprivation: Recent Changes in Social Disadvantage in Australia*, Sydney: Social Policy Research Centre, University of New South Wales.

Ssewanyana, S. and Okidi, J.A. (2007). Poverty estimates from the Uganda National Household Survey III, 2005/6. *Economic Policy Research Centre Occasional Paper No.34.* Kampala.

Townsend, P. (1979) *Poverty in the United Kingdom*. London. Allan Lane and Penguin Books.

Townsend, P. (1987) *Deprivation, Journal of Social Policy*, 16, 1, pp. 125-146.

Townsend, P. and Gordon, D. (1989) *Low Income Households*, Memorandum of Evidence to the House of Commons Social Services Committee, 579, 45-73.

Trinies, V., Garn, J.V., Chang, H.H. and Freeman, M.C. (2016) The Impact of a School-Based Water, Sanitation, and Hygiene Program on Absenteeism, Diarrhea, and Respiratory Infection: A Matched-Control Trial in Mali. *The American journal of tropical medicine and hygiene*. 94(6):1418–25. https://doi.org/10.4269/ajtmh.15-075

UBoS (2007) *Projections of demographic trends in Uganda 2007-2017*. Kampala, Uganda Bureau of Statistics.

UBoS (2012) *Compendium of Statistical Concepts and Definitions [Edition IV]*. Kampala, Uganda Bureau of Statistics. https://www.ubos.org/wp-content/uploads/publications/03_2018Compendium_Vol4.pdf

UBoS (2020a) *COVID-19 Impact Monitoring, Round 1, June 2020*. Kampala, Uganda Bureau of Statistics.

UBoS (2020b) *COVID-19 Impact Monitoring, Round 2, July/August 2020*. Kampala, Uganda Bureau of Statistics.

UBoS (2021a) *National Mid Year Population Projections by Single Age (2105-2050)*. Kampala, Uganda Bureau of Statistics. https://www.ubos.org/explore-statistics/20/

UBoS (2021b) The Uganda National Household Survey (UNHS 2019/20) Report. Kampala, Uganda Bureau of Statistics. https://www.ubos.org/wp-content/uploads/publications/09_2021Uganda-National-Survey-Report-2019-2020.pdf

UBoS and ICF (2018) *Uganda Demographic and Health Survey 2016*. Kampala, Uganda and Rockville, Maryland, USA: UBOS and ICF.

UNDP (2000) *Human Development Report 2000: Human Rights and Development*. New York: UNDP.

UNESCO (2005) *Children in Abject Poverty in Uganda: A Study of Criteria and Status of those in and out of School in Selected Districts in Uganda*. Paris, United Nations Educational, Scientific and Cultural Organization (UNESCO), Ministry of Finance, Planning and Economic Development (MFPED) and Ministry of Education and Sports (MOES).

UN-HABITAT (2007) *State of the World's Cities 2005/07. Slums: Overcrowding of "Hidden Homelessness"*. UN-HABITAT Feature/Backgrounder. Nairobi, Kenya, http://mirror.unhabitat.org/documents/media_centre/sowcr2006/SOWCR%206.pdf

UN-HABITAT (2010). *The State of African cities 2010. Governance, Inequality and Urban land Markets*. Nairobi, Kenya: United Nations Human Settlement Programme.

UNICEF (2014) *Situation Analysis of Child Poverty and Deprivation in Uganda*. Kampala. Ministry of Gender, Labour and Social Development, Uganda; UNICEF, Uganda, Economic Policy Research Centre, Uganda.

UNICEF (2017) *Social Protection Investment Case*. Kampala. Ministry of Gender, Labour and Social Development, Uganda; UNICEF, Uganda, Economic Policy Research Centre, Uganda.

UNICEF (2021) *Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities*. UNICEF, New York.

Witter, S. (2002) *The Silent Majority: Child Poverty in Uganda*. London, Save the Children.

Witter, S. and Bukokhe, J. (2004). Children's perceptions of poverty, participation, and local governance in Uganda. *Development in Practice*, 14, 5, 645–659.

World Bank (2020) Poverty and Equity Brief: Uganda. Washington D.C., World Bank. https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_UGA.pdf

World Food Programme (2013) *State of School Feeding Worldwide*. Rome, World Food Programme https://www.wfp.org/content/state-school-feeding-worldwide-2013

Zia, N., Bachani, AM., Kajungu, D., Galiwango, E., Loeb, M., Diener-West, M., et al. (2022) Understanding child disability: Factors associated with child disability at the Iganga-Mayuge Health and Demographic Surveillance Site in Uganda. *PLoS ONE* 17(4): e0267182. https://doi.org/10.1371/journal.pone.0267182

APPENDICES

APPENDIX 1:

MEASURING MULTIDIMENSIONAL POVERTY IN UGANDA: A STEP-BY-STEP GUIDE

Thirty-five material and social deprivation questions for households, adults and children were included in the UNHS 2016/17 by UBoS after a detailed expert review of similar deprivation question modules which had been used in African (particularly South Africa) and other developing countries. UBoS consulted with UNICEF and academics at the University of Bristol and were also advised by Dr Viliami Fifita (the Government Statistician, Kingdom of Tonga) who is the Chair of the PSSC (Pacific Statistics Steering Committee) on poverty measurement for the SDGs. This represents an excellent example of South-South cooperation in improving poverty measurement methodology.

Based on analyses of the 2016/17 UNHS results, some of the deprivation questions were revised and updated – six household and sixteen child deprivation questions were included in the UNHS 2019/20 survey.

HOUSEHOLD ITEMS (relevant to all household members)

Please say whether you think each of the following is essential for everyone to be able to afford in order for them to enjoy an acceptable standard of living in Uganda today. If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER

TABLE A1.1: **Consensual Child Poverty Household Items Questions in the UNHS 2029/20**

ITEM	IS [ITEM] 1 = ESSENTIAL 2 = DESIRABLE, BUT NOT ESSENTIAL 3 = NEITHER 98 = DK	DO YOU HAVE [ITEM]? 1 = HAVE IT 2 = DON'T HAVE , CAN'T AFFORD 3 = DON'T HAVE, DON'T WANT 4 = DON'T HAVE, FOR ANOTHER REASON 98 = DK 97 =NA
	HP01	HP02
QH1 Enough money to repair or replace any worn out furniture		
QH2 Enough money to repair or replace broken electrical goods, e.g. a refrigerator		
QH3 To be able to make regular savings for emergencies		
QH4 To be able to replace broken pots and pans for cooking		
QH5 Enough money to repair a leaking roof for the main living quarters		
QH6 Have your own means of transportation (e.g. car, bike, motorcycle, etc)		

CHILD ITEMS (FOR HOUSEHOLDS WITH AT LEAST ONE MEMBER BELOW 18 YEARS OF AGE)

Please say whether you think each of the following is essential for every parent or caregiver to be able to afford for children they care for in order for them to enjoy an acceptable standard of living in Uganda today. If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER'.

TABLE A1.2: **Consensual Child Poverty Child Items Questions in the UNSH 2019/20**

ITEM	IS [ITEM]? 1=ESSENTIAL 2= DESIRABLE, BUT NOT ESSENTIAL 3= NEITHER 98= DK	DO YOU HAVE [ITEM]? 1=HAVE IT 2= DON'T HAVE , CAN'T AFFORD 3= DON'T HAVE, DON'T WANT 4= DON'T HAVE, FOR ANOTHER REASON 98= DK 97=NA
	CP01	CP02
QC1 Three meals a day		
QC2 Two pairs of properly fitting shoes, including a pair of all-weather shoes		
QC3 Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)		
QC4 Books at home suitable for their age (including reference and story books)		
QC5 Some new clothes (not second hand or handed on/down)		
QC6 Educational toys and games		
QC7 A visit to a health facility when ill and all the medication prescribed to treat the illness		
QC8 Own bed		
QC9 Own blanket		
QC10 Two sets of clothing		
QC11 Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid		
QC12 All fees, uniform of correct size and equipment required for school (e.g. books, school bag, lunch/lunch money, stationery)		
QC13 To be able to participate in school trips or events that cost money		
QC14 A desk and chair for homework for school aged children		
QC15 Bus/taxi fare or other transport (e.g. bicycle) to get to school		
QC16 Own room for children over 10 of different sexes		

Analytical Method

It is of paramount importance to avoid producing a poverty measure which is simply a collection of things the authors think are 'bad' added together in an essentially arbitrary manner. There are, unfortunately, many studies that use such arbitrary poverty measures and they invariably have limited credibility or impact (Gordon, 1995). The robust measurement of both adult and child poverty requires a methodology that allows the 'best' set of deprivation indicators to be selected and also the rejection of inadequate indicators.

Building on recent methodological advances from the Poverty and Social Exclusion project[26], Guio, Gordon and Marlier (2012) proposed a theory-based analytical framework for developing robust aggregate deprivation indicators that can be used for analytical and monitoring purposes at national and regional levels (see also Guio et al., 2016; 2017; 2018). The optimal list of deprivation indicators should be identified based on four criteria:

1. The **suitability** of each deprivation item, in order to check that citizens in Uganda (as well as the different population sub-groups within the country) perceive them as necessary for people to have an 'acceptable' standard of living. 'Suitability' should thus be understood as the 'face validity' of the measure among Ugandan citizens.
2. The **validity** of individual deprivation items, to ensure that each item exhibits statistically significant relative risk ratios with independent variables known to be correlated with deprivation. Five validators were used to assess criterion validity (Cronbach and Meehl, 1955):
   a) the Head of Household's education level (scored from 1 to 8 - from *'degree'* to *'no formal education'*);
   b) Expenditure poverty using the official measure;
   c) Head of Household's economic activity (*'working in the cash economy'* vs *'subsistence/family worker or unemployed'*);
   d) Subjective poverty (scored from 1 to 5 - from *'very rich'* to *'very poor'*); and
   e) International Socio-Economic Index of occupational status (ISEI) – a widely used measure of occupational status.

26 http://www.poverty.ac.uk/

Extensive research has shown that people suffering from deprivation are more likely to have lower incomes, worse education and lower status occupations compared with people who are not deprived. In addition, people who are deprived are *a priori* more likely to consider themselves to be 'poor' (Bradshaw and Finch, 2003).

3. The **reliability** of the deprivation scale, to assess the internal consistency of the scale as a whole, i.e., how closely related the set of deprivation items are as a group. This assessment can be undertaken using the basis of the Cronbach's Alpha statistic and a Classical Test Theory (CTT) framework and complemented with additional tests on the reliability of each individual item in the scale based on Item Response Theory (IRT).
4. The **additivity** of items, to check whether a child or adult with a deprivation indicator score of '2' (suffering from 2 deprivations) is in reality suffering from more severe deprivation than a person with a score of '1', i.e., that the deprivation indicator's components add up.

Only the deprivation items that successfully pass these four steps should be considered eligible for being aggregated into a final deprivation index. In particular, it is important that a deprivation measure does not attempt to aggregate 'apples and pears' – the components of such a measure need to be adequate measures of an underlying latent construct (i.e., poverty). The step-by-step details of the results of these tests can be found below:

STEP 1 – CREATING A SUITABLE DEPRIVATION INDEX

Select the deprivation indicators that 50% or more of the population agree are 'essentials' for everyone to be able to afford in order for them to enjoy an acceptable standard of living (see Tables A1.3 and A1.4).

TABLE A1.3: **Percentage of Respondents Viewing the Child Deprivation Items as Essential**

	CHILD DEPRIVATION ITEMS	2019/20 % ESSENTIAL	2016/17 % ESSENTIAL
1	A visit to the health facility when ill and all prescribed medication	95%	97%
2	Three meals a day	92%	96%
3	Two sets of clothing	92%	94%
4	All fees, uniforms of correct size and equipment	86%	88%
5	Toiletries to be able to wash everyday	85%	93%
6	Own blanket	82%	85%
7	Two pairs of properly fitting shoes	80%	79%
8	Own bed	78%	81%
9	Own room for children over 10 of different sexes	78%	76%
10	Some new clothes	68%	70%
11	Books at home for their age	62%	71%
12	Bus/taxi fare or other transport	62%	68%
13	To be able to participate in school trips	58%	69%
14	A desk and chair for homework	50%	55%
15	Presents for children once a year on special occasions	39%	54%
16	Educational toys and games	38%	53%
17	Some fashionable clothes for secondary school children		37%
18	Own cell phone for secondary school children		22%

Source: Ugandan National Household Survey (N= 13,706 respondents)

Note: unless otherwise stated, throughout the threshold analyses, cases were weighted by sample adjusted for age and sex and weighted down to original sample size.

TABLE A1.4: **Percentage of Respondents Who View the Household Deprivation Items as Essential**

	HOUSEHOLD DEPRIVATION ITEMS	2019/20 % ESSENTIAL	2016/17 % ESSENTIAL
1		91%	92%
2	Enough money to repair a leaking roof for main living quarters	84%	86%
3	To be able to replace broken pots and pans for cooking	76%	84%
4	Have your own means of transportation	73%	79%
5	Enough money to repair or replace any worn out furniture	69%	78%
6	Enough money to repair or replace broken electrical goods	50%	56%

Source: Ugandan National Household Survey (N= 13,706 respondents)

Tables A1.3 and A1.4 show that only the two deprivation items below were dropped, meaning that fewer than 50% of respondents considered them to be essentials. This means that these items do not have the support of the majority of the Ugandan population in 2019/20 and thus lack face validity.

- Presents for children once a year on special occasions (39%)
- Educational toys and games (38%)

In 2016/17, the majority of parents considered both these items to be essential for children, however, the impact of the COVID-19 pandemic may have affected parent's views about what are the essential possessions and social activities for Ugandan children.

The remaining 20 deprivation items (14 Child and 6 Household) were then tested to see if they were valid indicators of poverty.

STEP 2 - CREATING 'A PREFERENCE FREE' DEPRIVATION INDEX

In order to distinguish respondents' choices about how to live from constraints resulting from insufficient income and other resources, only select (where available) items for the deprivation index that people 'don't have because they can't afford' them.

TABLE A1.5: **Percentage of Children Deprived of Particular Item in 2016/17 and 2019/20**

	CHILD DEPRIVATIONS	2019/20 % DON'T HAVE, CAN'T AFFORD	2016/17 % DON'T HAVE, CAN'T AFFORD
1		71%	70%
2	Educational toys and games	69%	44%
3	Books at home for their age	68%	59%
4	Bus/taxi fare or other transport	66%	41%
5	A desk and chair for homework	65%	45%
6	Own bed	64%	74%
7	Two pairs of properly fitting shoes	60%	71%
8	Own blanket	59%	66%
91	To be able to participate in school trips	59%	38%
10	Some new clothes	52%	63%
11	Own room for children over 10 of different sexes	44%	36%
12	Three meals a day	42%	48%
13	All fees, uniforms of correct size and equipment	42%	34%
14	A visit to the health facility when ill and all prescribed medication	31%	33%
15	Toiletries to be able to wash everyday	29%	29%
16	Two sets of clothing	11%	17%
	Some fashionable clothes for secondary school children		9%
	Own cell phone for secondary school children		9%

Source: Ugandan National Household Survey (N= 35,190 children)

TABLE A1.6: **Percentage of Households Deprived of an Item in 2019/20 and 2016/17**

	HOUSEHOLD DEPRIVATIONS	2019/20 % DON'T HAVE, CAN'T AFFORD	2016/17 % DON'T HAVE, CAN'T AFFORD
1	Have your own means of transportation	67%	67%
2	Enough money to repair or replace any worn out furniture	56%	62%
3	To be able to make regular savings for emergencies	49%	55%
4	Enough money to repair a leaking roof for main living quarters	42%	42%
5	To be able to replace broken pots and pans for cooking	42%	40%
6	Enough money to repair or replace broken electrical goods	37%	65%

Source: Ugandan National Household Survey (N=13,706 household respondents)

Age-appropriate child indicators in Uganda

Children's needs change as they grow older, thus deprivation measures for children need to be age appropriate. The following protocol was used:

- Age 11-17 for bedrooms for every child of different sex
- Age 6-17 for a desk and chair for homework, going on a school trip. Bus/taxi fare, school fees and uniforms
- Age 3-17 for books suitable for age
- Age 0-17 for all other child items.

STEP 3 – CREATING A VALID DEPRIVATION INDEX

It is essential that each component in the index is a valid measure of deprivation. The simplest way to achieve this is to ensure that every deprivation item has a high odds ratio (using Logistic Regression) with independent indicators known to correlate highly with poverty – specifically:

1. Expenditure poverty using the official measure (1 poor, 0 not poor) - **Poor**;
2. Subjective poverty (scored from 1 to 4 - from *'rich'* to *'very poor'*) – **Sub_pov**
3. Head of Household's education level (scored from 1 to 4 - from *'Tertiary'* to *'no formal education'*) - **HHEd**;

TABLE A1.7: **Logistics Regression Validity Tests for Children and Household Deprivation Items**

	CHILDREN AND HOUSEHOLD ITEMS	POOR	SUB_POV	HHED
1	Two pairs of properly fitting shoes, including a pair of all-weather shoes	5.9	3.7	2.2
2	Three meals a day	4.0	3.1	1.9
3	Some new clothes (not second hand or handed on/down)	4.0	2.5	1.9
4	Own blanket	4.0	2.5	1.9
5	Own bed	3.5	2.2	1.8
6	A visit to a health facility when ill and all the medication prescribed to treat the illness	3.0	2.1	1.7
7	To be able to replace broken pots and pans for cooking	2.8	2.3	1.7
8	Two sets of clothing	2.7	1.9	1.8
9	Enough money to repair a leaking roof for the main living quarters	2.7	2.2	1.5
10	All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, station	2.7	1.7	1.6
11	Enough money to repair or replace any worn out furniture	2.6	2.1	1.6
12	Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	2.5	2.1	1.7
13	To be able to make regular savings for emergencies	2.5	2.1	1.7
14	Have your own means of transportation (e.g. car, bike, motorcycle, etc)	2.3	2.1	1.7
15	Books at home suitable for their age (including reference and story books)	2.3	1.7	1.7
16	To be able to participate in school trips or events that cost money	2.2	1.5	1.6
17	Bus/taxi fare or other transport (e.g. bicycle) to get to school	1.8	1.3	1.5
18	A desk and chair for homework for school aged children	1.7	1.4	1.4
19	Own room for children over 10 of different sexes	1.5	1.2	1.3
20	Enough money to repair or replace broken electrical goods, e.g. a refrigerator	1.4	1.2	1.1

Source: Ugandan National Household Survey (N= 35,208 children)

Note: All above analyses were run on children only. All the odd ratios are significant at >0.001 level.

Basic Needs Poverty coded as Yes/No, Subjective poverty coded as 1'Rich' 2 'Neither poor nor rich' 3'Poor' 4'Very Poor'. Head of Household Education Level is coded as 1'Tertiary' 2'Secondary' 3'Primary' 4'None'.

The odds ratio Table A1.7 (above) shows where the respondent says that they, who cannot afford for their children to eat 'three meals a day', are four times more likely to be below the monetary poverty line (Poor). They were also nearly twice as likely to live with a head of household who has a low educational level. In both these cases, the 95% confidence intervals for these odds does not span 1.0 and so can be considered to be statistically 'significant'.

Table A1.7 shows that all the household and child deprivation items passed all five validity tests.

STEP 4 – CREATING A RELIABLE INDEX OF DEPRIVATION (CLASSICAL TEST THEORY)

Deprivation indices need to be both valid and reliable. A valid index is one which has an acceptably low level of *systematic* measurement error and a reliable index is one with an acceptably low level of *random* measurement error. The most common way to measure reliability is to use a Classical Test Theory framework and the Cronbach's Alpha statistic (Cronbach, 1951). A Cronbach's Alpha above 0.7 is considered acceptable in the Social Sciences. Table A1.8 shows that the Alpha for the 20 valid child and household deprivation items was 0.865 which indicates a high level of reliability.

Under certain circumstances, Cronbach's Alpha is not a good measure of reliability, so Table A1.8 also includes estimates of MacDonald's Omega and Guttman's Lambda 2 reliability measures as well as how these measures would change if individual deprivation items were dropped from the deprivation index. All three measures (Alpha, Lambda2 and Omega) produce consistent results – the deprivation index is highly reliable but the reliability could be increased by a small amount of 'Have your own means of transportation (e.g., car, bike, motorcycle, etc' and 'Enough money to repair or replace broken electrical goods, e.g., a refrigerator' were dropped from the deprivation index.

TABLE A1.8: **Cronbach's Alpha Scores for Child and Household Items Combined**

	CHILDREN AND HOUSEHOLD ITEMS	CRONBACH'S ALPHA IF DELETED	MCDONALD'S Ω IF ITEM DELETED	GUTTMAN'S λ2 IF ITEM DELETED
1	All fees, uniform of correct size and equipment required for school e.g. books, school bag, lunch/lunch money, station	.854	0.853	0.857
2	Two pairs of properly fitting shoes, including a pair of all-weather shoes	.855	0.853	0.857
3	To be able to participate in school trips or events that cost money	.855	0.854	0.857
4	To be able to replace broken pots and pans for cooking	.855	0.853	0.858
5	Books at home suitable for their age (including reference and story books)	.856	0.855	0.859
6	Some new clothes (not second hand or handed on/down)	.856	0.854	0.859
7	Own blanket	.856	0.854	0.859
8	Enough money to repair or replace any worn out furniture	.856	0.854	0.859
9	Enough money to repair a leaking roof for the main living quarters	.856	0.854	0.859
10	Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)	.858	0.857	0.862
11	A visit to a health facility when ill and all the medication prescribed to treat the illness	.858	0.856	0.860
12	Own bed	.858	0.857	0.861
13	A desk and chair for homework for school aged children	.858	0.856	0.859
14	To be able to make regular savings for emergencies	.858	0.857	0.861
15	Three meals a day	.859	0.858	0.862
16	Bus/taxi fare or other transport (e.g. bicycle) to get to school	.859	0.858	0.861
17	Two sets of clothing	.864	0.862	0.866
18	Own room for children over 10 of different sexes	.865	0.863	0.867
19	Have your own means of transportation (e.g. car, bike, motorcycle, etc)	.866	0.864	0.868
20	Enough money to repair or replace broken electrical goods, e.g. a refrigerator	.869	0.866	0.870
Total weighted alpha score		0.865	0.863	0.867

Source: Ugandan National Household Survey (N= 34,860 children)

Note: The total weighted alpha score suggests that the items are internally consistent. However, items highlighted by grey shading may be unreliable given the higher alpha scores when the item is deleted. Alpha if item deleted results are weighted, McDonald's Omega and Guttman's Lamda2 results are unweighted.

STEP 4B – CREATING A RELIABLE INDEX OF DEPRIVATION (ITEM RESPONSE THEORY)

Item Response Theory (IRT) models can provide additional information on the reliability of each individual item in the deprivation scale/index. IRT models describe the relationship between a person's response to questions and an unobserved latent trait such as knowledge of biology, level of happiness or amount of deprivation.

In Table A1.9, the column marked 'severity' can be interpreted as the likely severity of deprivation suffered by a child who lacks an item because their household/parents can't afford it. The severity scores in this table are measured in units of standard deviation from the population average. The table shows that respondents who do not have enough money to be able to afford their own means of transport have the lowest latent deprivation score, while those who cannot afford for their children to have two sets of clothes are likely to be much more severely deprived.

The column marked 'Discrimination' in Table A1.9 indicates how well the deprivation item distinguishes between 'deprived' and 'not deprived' children. The discrimination score has been converted into a correlation[27] (ranging between 0 and 1) and a score above 0.4 is considered to be an acceptable level of discrimination (Guio et al, 2012). Thus, Table A1.9 shows that having enough money to replace or repair electrical goods does not discriminate well between the deprived and not deprived (discrimination = 0.16). By contrast, being unable to afford for your children to be able to participate in school trips or events that cost money has a very high discrimination score (0.71).

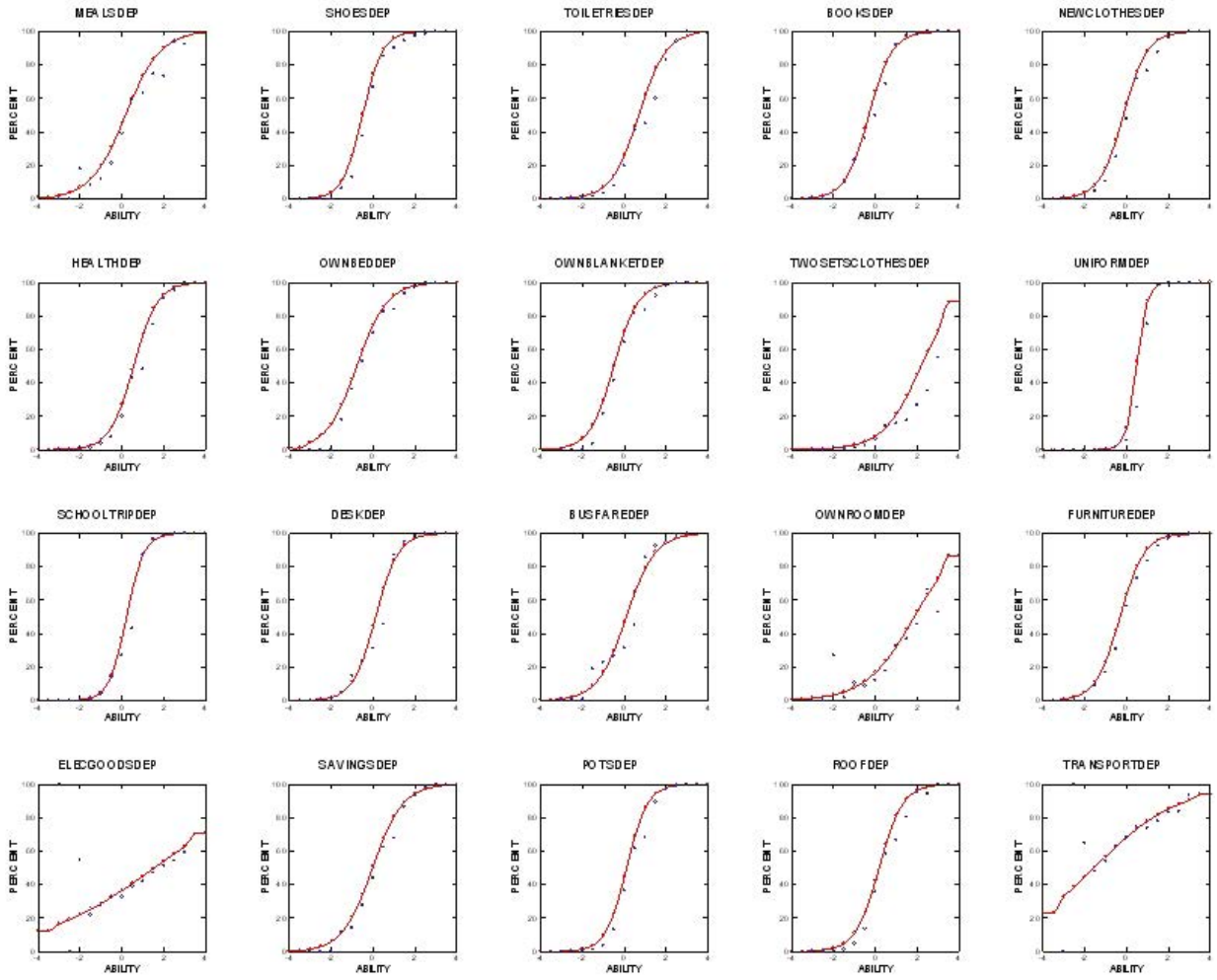
TABLE A1.9: **Severity and Discrimination Scores for Children and Households Deprivations**

	CHILDREN AND HOUSEHOLD ITEMS	SEVERITY	DISCRIMINATION
1	**Household:** to have own means of transport	-1.26	0.20
2	**Child:** Own bed	-0.38	0.55
3	**Household:** enough money to repair or replace worn-out furniture	-0.23	0.47
4	**Child:** Two pairs of properly fitting shoes	-0.22	0.51
5	**Child:** Books at home for their age	-0.21	0.49
6	**Child:** Own blanket	-0.17	0.60
7	**Child:** Some new clothes	-0.01	0.44
8	**Household:** to be able to make savings for emergencies	0.13	0.39
9	**Child:** bus/taxi fare or other transport	0.19	0.54
10	**Child:** a desk and chair for homework	0.20	0.61
11	**Child:** to be able to participate in school trips	0.28	0.71
12	**Household:** enough money to replace broken pots and pans	0.32	0.53
13	**Household:** enough money to repair a leaking roof for main living	0.33	0.49
14	**Child:** Three meals a day	0.48	0.36
15	**Child:** all school fees, uniforms of correct size and equipment	0.70	0.66
16	**Child:** A visit to health facility when ill and all prescribed medication	0.84	0.43
17	**Child:** Toiletries to be able to wash everyday	0.95	0.41
18	**Household:** enough money to repair or replace electronic goods	1.11	0.16
19	**Child:** own room for children over 10 of different sexes	1.79	0.28
20	**Child:** Two sets of clothing	2.62	0.29

Note (*) Except for the six items with <0.40 factor scores, all other items appear to have relatively high ability to distinguish between the deprived and the non-deprived. The negative severity scores mean that respondents who lack the associated items are UNLIKELY to be severely deprived.

27 The IRT discrimination coefficients (d) can be converted to correlations using the following formula: d / sqrt(3.29+d^{2})

FIG A1.1: **IRT Items Characteristic Curves for Chil and Household Deprivations**



The severity of deprivation is shown by the position of each asymptotic (i.e., 'S' shaped) curve (Figure A1.1 above) along the X-axis – the further to the right the more severe the deprivation. The effectiveness of each item to discriminate between deprived and non-deprived people is shown by how vertical each curve is - the more upright, the better the discrimination.

Ideally, a good deprivation index would be shown by a series of fairly vertical 'S' shaped curves spread out along the X-axis. The inflection point of each curve, that is, half the distance between the upper and lower asymptotes, where the slope is steepest, should lie between 0 and +3 on the X-axis. However, **Elecgoods** ('replace broken electrical goods') and **Transport** ('Have your own means of transportation ') stand out as items which conform less to the ideal pattern. By contrast, **Shoes** ('Two pairs of properly fitting shoes, including a pair of all-weather shoes') and **Uniform** ('All fees, uniform of correct size and equipment required for school e.g., books, school bag, lunch/lunch money, station') correspond closely to the ideal, i.e. a fairly vertical 'S' shaped curve.

Tables A1.8 and A1.9 show that the two items below failed both the Classical Test Theory and Item Response Theory tests, i.e., they both lack the ability to distinguish the 'poor' from the 'not poor' in Uganda (Correlation > 0.4) and 'own means of transport' measures a relatively high standard of living (more than 1 standard deviation above the average). The two problematic items are:

- To have own means of transport
- Enough money to repair or replace electronic goods

SUMMARY OF ITEMS THAT FAILED SUITABILITY, RELIABILITY AND VALIDITY TESTS

Suitability

- Presents for children once a year on special occasions
- Educational toys and games

Validity

- All of the remaining items are considered to pass the validity tests

Reliability

- enough money to repair or replace broken electrical goods
- to have own means of transport

Out of the 22 deprivation questions included in the consensual deprivation module of the UHNS 2016/17 survey, four items failed the suitability, validity or reliability tests and were thus excluded and 18 deprivation items were retained for further testing.

STEP 5 – CHECKING THE REVISED INDEX IS ADDITIVE AFTER REMOVING OUTLIERS

The components of any deprivation index should be additive, e.g., a person or household with a deprivation score of three should be poorer than a person or household with a deprivation score of two. Some components of the index may not be additive, for example, it is important to check that a respondent who 'cannot afford' two pairs of properly fitting shoes and a bed for each of their children is poorer than a person who 'cannot afford' beds but has shoes for their children.

It is also essential to remove large outliers[28]. For example, there is invariably somebody in a survey who says they earn millions of shillings but cannot afford any of the deprivation items. Figure A1.2 shows the distribution of equivalised monthly household expenditure after the removal of likely outliers. As would be expected, Figure A1.2 shows a right-skewed normal distribution of household expenditure, after adjusting for household size and composition (i.e., equivalisation).

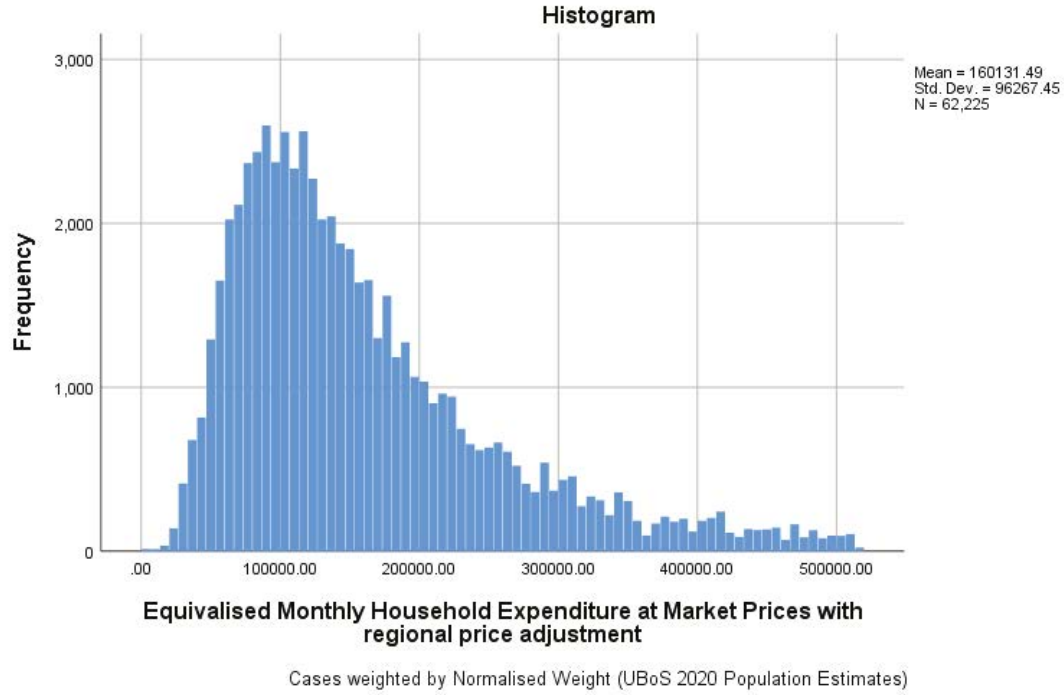
It should be noted that these 'rich' households were only excluded in the models used to identify the additivity of the deprivation items and the optimum poverty line (as their inclusion would have distorted these results). The 'rich' households are of course included in all the results tables in the main report (e.g., Chapter 4).

Additivity was checked using an ANOVA model and all suitable, valid and reliable deprivations passed these additivity tests[29].

28 The outlier labelling rule of Hoaglin and Iglewicz (1987) was used for determining the equivalised household expenditure cut off point for: [Q3 + 2.2 X (Q3-Q1)]. In total 2,243 outliers were omitted which is approximately 3.4% of the UNHS sample.

29 The detailed additivity results are not shown here but are available from Professor Gordon (e-mail: dave.gordon@bristol.ac.uk)

FIGURE A1.2: **Histogram of Equivalised Monthly Household Expenditure in the 2019/20 UNHS After Removal of Likely Outliers**



The final suitable, valid, reliable and additive material and social deprivation index included four household deprivations, nine adult deprivation and eighteen child deprivations (31 deprivations in total) and is shown in Table A1.10 (below).

TABLE A1.10: **Final Adult and Child Deprivation Index**

1. QC1 Three meals a day
2. QC2 Two pairs of properly fitting shoes, including a pair of all-weather shoes
3. QC3 Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)
4. QC4 Books at home suitable for their age (including reference and story books)
5. QC5 Some new clothes (not second hand or handed on/down)
6. QC7 A visit to a health facility when ill and all the medication prescribed to treat the illness
7. QC8 Own bed
8. QC9 Own blanket
9. QC10 Two sets of clothing
10. QC12 All fees, uniform of correct size and equipment required for school (e.g. books, school bag, lunch/lunch money, stationery)
11. QC13 To be able to participate in school trips or events that cost money
12. QC14 A desk and chair for homework for school aged children
13. QC15 Bus/taxi fare or other transport (e.g. bicycle) to get to school
14. QC16 Own room for children over 10 of different sexes
15. QH1 Enough money to repair or replace any worn out furniture
16. QH3 To be able to make regular savings for emergencies
17. QH4 To be able to replace broken pots and pans for cooking
18. QH5 Enough money to repair a leaking roof for the main living quarters

This deprivation index includes age-appropriate deprivation measures, e.g., deprivations which only affect school age children, etc. Thus, different age groups can potentially have different maximum scores. Nevertheless, the final adult and child deprivation index is both valid and highly reliable for all age groups.

RELIABILITY BY AGE GROUPS:

Pre-school (0-5):	Alpha = 0.833	Lambda 2 = 0.841	N=12
Primary school (6-12):	Alpha = 0.879	Lambda 2 = 0.885	N=17
Secondary School/Teenage (13-17):	Alpha = 0.889	Lambda 2 = 0.892	N=18

Values of Cronbach's Alpha above 0.7 are considered to indicate a reliable index and values above 0.8 indicate a highly reliable deprivation index. The results of the Classical Test Theory analyses show that Alpha is greater than 0.8 for all age groups and is highly reliable.

STEP 6 – FINDING THE 'OBJECTIVE' POVERTY LINE

The 'objective' poverty line can be defined as the division between the 'poor' group and the 'not poor' group that maximises the between group sum of squares and minimises the within group sum of squares. The graph below illustrates a multidimensional poverty line – where the 'poor' are identified as those with both a low income[30] and a low standard of living (e.g., a high deprivation score). The 'objective' or 'optimal' poverty line is shown in Figure A1.3 (below).

FIGURE A1. 3: **Multidimensional Poverty Line**

The 'objective' combined poverty line can be identified using the General Linear Model (GLM) in one of its forms (e.g., ANOVA, Discriminant Analysis or Logistic Regression), controlling for income, deprivation and household size and composition. The richest 3.4% of households were excluded from the modelling exercise.

The General Linear Models (both ANOVA and Logistic Regression) were used to determine the scientific poverty threshold, i.e., the deprivation score that maximises the between group differences and minimises the within group differences (sum of squares). These techniques were applied to a succession of groups created by increasing the number of items of which respondents were deprived. Thus, the first analysis was undertaken on groups defined by people lacking no items compared with people lacking one or more items (a deprivation score of one or more). Similarly, the second analysis was undertaken on a group comprised of people lacking one or no items against two or more items, and so forth.

The dependent variable in the ANOVA model was the equivalised monthly household expenditure (at market prices with regional price adjustments) and the independent variables were deprivation group (constructed as described above), number of adults in each household and the number of children in each household. With the Logistic Regression models, the dependent variable was the deprivation group and the independent variables were the equivalised monthly household expenditure at market prices with regional price adjustments, number of adults and number of children in the household.

30 Note: In setting the poverty threshold for Uganda, household expenditure- is used instead of income.

TABLE A1.11: **ANOVA and Logistic Regression Results for 10 Deprivation Groups**

MODEL *	ADULT AND CHILDREN F STATISTIC FOR CORRECTED ANOVA MODEL	ADULT AND CHILDREN LR CHI2 STATISTIC FOR LOGISTIC REGRESSION MODEL	KRUSKAL-WALLIS TEST STATISTIC
Null Model **	498		
Deprivation score of 1 or more	1,336	2,170	1,239,889
Deprivation score of 2 or more	1,898	3,432	2,051,234
Deprivation score of 3 or more	2,468	4,671	2,801,184
Deprivation score of 4 or more	2,842	5,621	3,368,962
Deprivation score of 5 or more	2,875	6,026	3,653,782
Deprivation score of 6 or more	**2,936**	6,481	3,894,785
Deprivation score of 7 or more	2,811	**6,550**	**3,896,033**
Deprivation score of 8 or more	2,592	6,273	3,789,347
Deprivation score of 9 or more	2,238	5,609	3,452,701
Deprivation score of 10 or more	1,838	4,706	2.906,486

Note (*): In the ANOVA and Logistic Regression models, total number of people in the household that are under 14 and 14 and above are used as controls to ensure compatibility with the equivalisation scale[31].

Note (**): The null model only contains the control variables

Table A1.11 shows that the Logistic Regression Model and Kruskal-Wallis model suggest and optimum poverty threshold of seven or more deprivations, whereas the ANOVA model suggests and optimum poverty threshold of six or more deprivations.

In theory, all three models should produce effectively the same results as they are both ANOVA and Logistic Regression methods are versions of the General Linear Model (with different assumptions). Najera and Gordon (2019) have shown, using Monte Carlo modelling, that these differences can be the result of problems with the survey data and that under most circumstances, the 'true' optimum threshold tends to either lie between the ANOVA and Logistic Regression results or is identified by the Logistic Regression model[32]. Thus, the optimum equivalised income poverty line has been set at 152,056 UXG per month i.e. mid way between the average income of households suffering from 6 deprivations (146,219 UXG) and 7 deprivations (157,911 UXG).

As deprivation can only be measured in whole numbers for single person households, so the average household deprivation score has been rounded to the nearest integer and the poor have been identified as those households/people who suffer from low household expenditures (below 152,065 UGX per month[33]) and seven or more deprivations – marked 'Poor' in Figure A1.4 (bottom left-hand corner). The error bar graph also shows the approximate location of the 'Not Poor' (Top Left), Vulnerable (Bottom Left) and Rising (Top Right) groups of households (see Step 7 below for details). Please note that the areas on the error bar graph do not correspond with the size of these four groups (i.e. there are many households with a deprivation score of zero).

31 Deprivation Median Equivalisation -1.0 First Adult, 0.8 additional adults (14+), 0.5 Child (<14) – se details in *Multidimensional Child Poverty and Deprivation in Uganda: Volume One, The Extent and Nature of Multidimensional Child Poverty, appendices*. Kampala, Government of Uganda & UNICEF. https://www.poverty.ac.uk/world/uganda

32 Logistic Regression models are less powerful than ANOVA models but make fewer assumptions so their results tend to be more robust as unsurprisingly in many circumstances data 'problems' are less likely to violate the Logistic Regression model's assumptions.

33 In 2016/17 the equivalised low-income poverty threshold for adults and children was 141,771 UGX per month. Thus, the equivalised low income threshold has increased by 10,285 UXG per month since 2016/17 – circa 7.3%. The CPI inflation rate between the 2016/17 financial year and the 2019/20 financial year was about 9% (UBOS 2021 *UGANDA CONSUMER PRICE INDEX November 2021,* https://www.ubos.org/wp-content/uploads/publications/12_2021CPI_PUBLICATION_NOVEMBER_2021.pdf

FIG A1.4: **Deprivation Index Score by Expenditure**

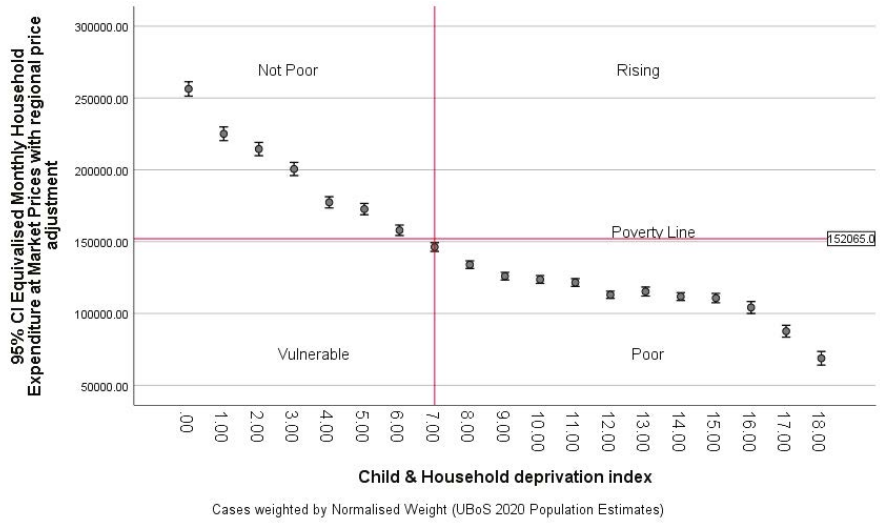


Figure A1.4 shows the relationship between the deprivation index score and monthly household expenditure (after adjusting for household size and type and regional price difference) in the 2019/20 UNHS, after the removal of expenditure outliers. Townsend (1979) argued that, as income declined, deprivation would increase but there came a point in this relationship where an additional small fall in income would result in a large increase in deprivation and this 'break of slope' could be used to identify the optimal poverty line. This is shown in Figure A1.4 as the poverty line. This identifies people as poor when they cannot afford but would like to have seven or more essential deprivation items and their equivalent household income is less than 152,065 UGX per month.

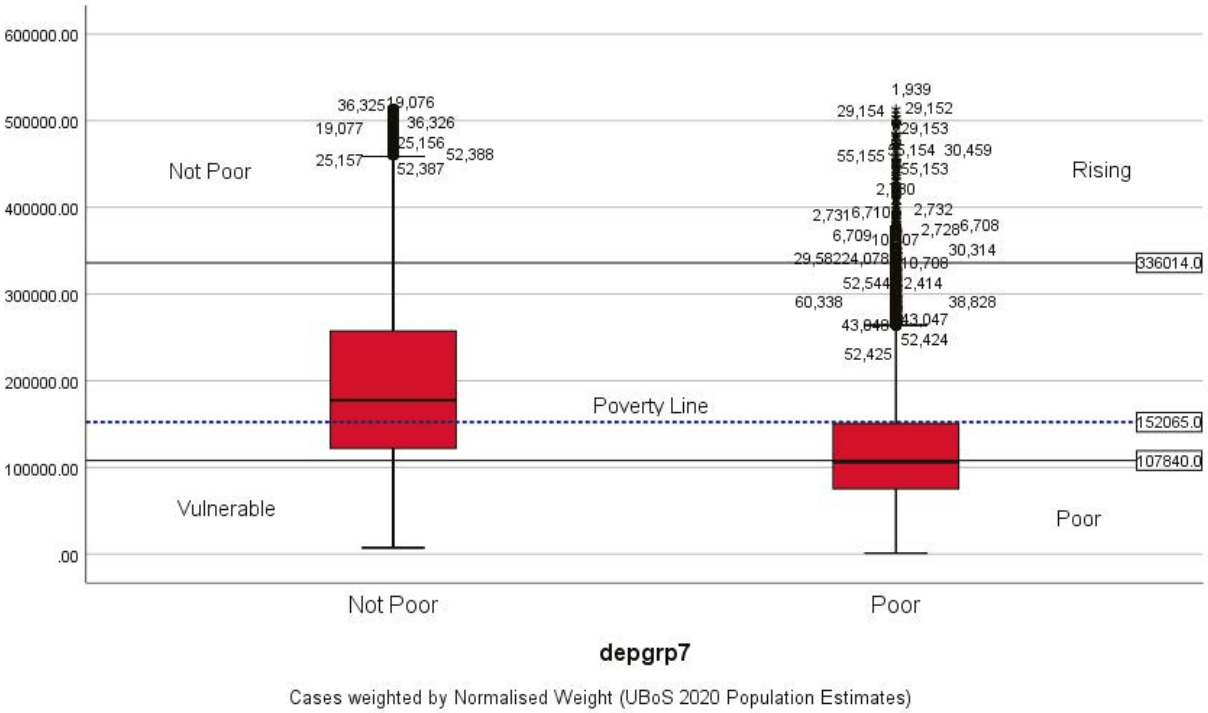
It should be noted that the official poverty line is set at about half this expenditure level. The current Uganda national poverty line was set in 1998 (using 1993 data) and is therefore unlikely to adequately reflect the 21st Century realities of poverty in Uganda. The Official Ugandan poverty line is more like a destitution threshold than a poverty threshold in present day Uganda – the official poverty line varies from the equivalent of $0.88 to $1 US dollars a day (at 2017 prices) depending on the region of the country (Owori, 2018).

STEP 7 - IDENTIFYING THOSE RISING OUT OF POVERTY AND SINKING INTO POVERTY (VULNERABLE)

In a cross-sectional survey, there will probably be a few people who are 'rising out of poverty', e.g., those with a high deprivation score and a high income. Their incomes and/or 'standard of living' should have increased in the recent past. These few cases can be identified using boxplots of household expenditure by 'deprivation threshold group' (found on Step 6) and controlling for household size/type. The outliers (with high household expenditures) in each household type should be those rising out of poverty.

The boxplot below shows that there are a few children and adults who have deprivation scores of six or more but also high household equivalised expenditures – over 332,059 UXG per month (e.g., rising out of poverty) – see top right of the boxplot (Figure A1.5).

FIG A1.5: **Boxplot Showing the Multidimensional Poverty Groups**



Cases weighted by Normalised Weight (UBoS 2020 Population Estimates)

The boxplot also shows the other three groups of households. The 'Poor' are those households suffering from six or more deprivations and low equivalised household expenditures (under 152,065 UXG). The 'Vulnerable' are those households with a low score deprivation (less than six deprivations), who also have a low equivalised household expenditure (below 107,840 UXG per month), i.e., close to the median income of depgrp7. The 'Not Poor' are the remaining households that have not been classified as 'poor', 'rising' or 'vulnerable'.

Using these definitions, the UNHS survey found that in Uganda in 2019/20:

- 44% of children were living in multidimensional poverty
- 1% were rising out of poverty
- 7% were potentially vulnerable to poverty
- Almost half (48%) were relatively well off.

However, it is important to note that the COVID-19 pandemic resulted in an increase in child poverty and vulnerability to poverty (Table A1.12).

TABLE A1.12: **Change in Child Poverty Between 2019 and 2020**

	BEFORE THE PANDEMIC (2019)	DURING THE PANDEMIC (2020)
Poor	42%	47%
Rising	1%	1%
Vulnerable	6%	7%
Not Poor	51%	45%

APPENDIX 2:
COVID-19 ANALYSES METHODOLOGY

This appendix details the estimation process of the model-based adjustments for making less biased comparisons between the two sub-samples: before and during COVID-19.

Model-Based Adjustments

In social science, it is very difficult to have randomised experiments for making casual inferences about the effect of a specific intervention upon a possible outcome. However, via modelling, it is possible to approximate such a type of experiment using quasi-experimental techniques. These techniques aim to compare differences in groups attributable to certain event or treatment.

In the case of the UNHS and the estimation of poverty, it is possible to frame the comparison before and during COVID-19 following the rationale of a quasi-experiment. In this case, the hypothesis is that the pandemic had an effect upon both monetary and multidimensional poverty. Hence, after controlling for observable differences in both sub-samples, it is of interest to know whether such an effect holds given the data.

There are several quasi-experimental methods suggested in the specialized literature. Two approaches were adopted for the analysis of the changes in poverty using the UNHS. The first one relied on a method called nearest neighbour matching where a distance is estimated between each treated unit (During COVID-19) and each control unit (Before COVID-19). The idea is to have comparable sets of units. This method is rather fast but is limited in that it does not optimises the overall selection, i.e., once a match is found, the algorithm moves forward without taking into account other possible matches. The distance between units can be computed using different approaches. Mahalanobis distance was used for this analysis, which is widely known and used in the literature.

The second approach used was the subclass method. This approach is also widely used and it performs a sub-classification based on a distance measure (i.e. propensity score). It is called sub-classification because the units are distributed across subclasses based on the propensity score. Because the target variable is categorical (i.e., poverty status) the propensity scores were computed using a Generalised Linear Model (GLM).

Both methods require a model to estimate the distances and produce the matchings across units. The model, ideally, should take into consideration those variables that explain differences between groups. The main differences are attributable to discrepancies in the socio-economic and demographic profile of the before and during COVID-19 sub-populations. The model for both matching approaches considered the following variables:

- Urban/rural
- Age of the household head
- Gender of the household head
- Region of residence
- Educational attainment of the household head
- Adequate roof material deprivation
- Adequate wall material deprivation
- Adequate floor material deprivation

The main output of both methods is a sub-sample with matched weights. A successful matching can be evaluated by looking at the weighted differences between the treatment and control groups. If differences remain large, that means that the groups are not comparable and that the differences are not strictly attributable to COVID-19. When the matching is successful, it is possible to estimate unbiased differences in poverty between groups.

APPROACH 1: NEAREST NEIGHBOUR WITH MAHALANOBIS DISTANCE

Table A2.1 shows the results of the matching performed under the nearest neighbour method with Mahalanobis distance. The outcome of this method is quite poor as the discrepancies in the main remained very much the same after the matching, especially for the material deprivation variables. Therefore, it would not be advisable to make comparisons based on the weights derived from this approach.

TABLE A2.1: **Comparison of the Means of Each Variable by Sub-Sample (Before and During Covid-19) Using Mahalanobis Distance**

VARIABLE	MEANS BEFORE	MEANS DURING
urban	0.3036	0.1693
hhAgegr	3.7675	3.7733
hhsex	0.7159	0.7101
`factor(region)`1	0.2047	0.1699
`factor(region)`2	0.3025	0.3555
`factor(region)`3	0.2380	0.2358
`factor(region)`4	0.2548	0.2389
`factor(hhedlev)`1	0.1526	0.1860
`factor(hhedlev)`2	0.3718	0.3941
`factor(hhedlev)`3	0.1458	0.1334
`factor(hhedlev)`4	0.1539	0.1479
`factor(hhedlev)`5	0.0824	0.0687
`factor(hhedlev)`6	0.0935	0.0699
proof	0.7747	0.7043
pwall	0.5152	0.4688
pfloor	0.3847	0.3255

APPROACH 2: SUBCLASS METHOD. PROPENSITY SCORE MATCHING USING GENERALISED LINEAR MODELS FOR ESTIMATING THE DISTANCES

The results of the second approach are shown in Table A2.2. This method resulted in a much better matching of the units in the two sub-samples. The differences are rather small for all variables and, hence, it allows to make comparisons that are attributable to the treatment variable.

TABLE A2.2: **Comparison of Means of Each Variable by Sub-Sample (Before and During Covid-19) Using Subclass Method**

VARIABLE	MEANS BEFORE	MEANS DURING
distance	0.5327	0.5308
urban	0.2932	0.2766
hhAgegr	3.7688	3.7829
hhsex	0.7125	0.7179
`factor(region)`1	0.1944	0.1883
`factor(region)`2	0.3386	0.3505
`factor(region)`3	0.2331	0.2394
`factor(region)`4	0.2339	0.2218
`factor(hhedlev)`1	0.1551	0.1522
`factor(hhedlev)`2	0.3748	0.3714
`factor(hhedlev)`3	0.1449	0.1539
`factor(hhedlev)`4	0.1522	0.1484
`factor(hhedlev)`5	0.0802	0.0791
`factor(hhedlev)`6	0.0929	0.0949
proof	0.7365	0.7387
pwall	0.4968	0.4920
pfloor	0.3727	0.3666

Estimated effect of the Pandemic Upon Monetary and Multidimensional Child Poverty

Table A2.3 shows the estimated effect -covid row- of the pandemic upon the odds of being either monetary or multidimensionally poor. This effect corresponds to the treatment effect from the quasi-experimental design and therefore considers the sampling differences between both sub-samples.

In both cases, the pandemic increased the chances of being poor (See covid row). In the case of monetary poverty, the pandemic increased the chances by 50% of being monetary poor and by 25% of being multidimensionally poor.

TABLE A2.3: **Estimated Effect of the Pandemic Upon the Odds of Being Monetary and Multidimensionally Child Poor**

	MONETARY POVERTY		MULTIDIMENSIONAL POVERTY	
	NEAREST NEIGH METHOD	SUBCLASS METHOD	NEAREST NEIGH METHOD	SUBCLASS METHOD
(Intercept)	0.754	0.839	1.798	1.968
	(0.057)	(0.049)	(0.073)	(0.064)
covid	**1.528**	**1.511**	**1.293**	**1.252**
	(0.021)	**(0.019)**	**(0.027)**	**(0.024)**
urban	1.014	1.091	0.756	0.820
	(0.029)	(0.023)	(0.037)	(0.030)
hhAgegr	0.984	0.983	1.079	1.063
	(0.007)	(0.006)	(0.010)	(0.009)
hhsex	1.209	1.256	0.834	0.872
	(0.025)	(0.022)	(0.032)	(0.028)
factor(region)2	2.632	2.446	1.959	1.853
	(0.037)	(0.031)	(0.044)	(0.037)
factor(region)3	1.695	1.852	1.534	1.657
	(0.044)	(0.037)	(0.054)	(0.046)
factor(region)4	1.162	1.184	0.946	0.942
	(0.041)	(0.035)	(0.049)	(0.042)
factor(hhedlev)2	0.547	0.531	0.680	0.681
	(0.030)	(0.027)	(0.041)	(0.037)
factor(hhedlev)3	0.420	0.395	0.510	0.482
	(0.038)	(0.033)	(0.051)	(0.045)
factor(hhedlev)4	0.293	0.274	0.346	0.337
	(0.040)	(0.036)	(0.051)	(0.046)
factor(hhedlev)5	0.233	0.218	0.320	0.314
	(0.053)	(0.047)	(0.065)	(0.057)
factor(hhedlev)6	0.122	0.121	0.137	0.144
	(0.067)	(0.055)	(0.081)	(0.067)
proof	0.780	0.712	0.722	0.691
	(0.032)	(0.028)	(0.042)	(0.038)
pwall	0.893	0.904	0.781	0.816
	(0.028)	(0.025)	(0.036)	(0.032)
pfloor	0.380	0.368	0.385	0.387
	(0.031)	(0.027)	(0.037)	(0.033)
Num.Obs.	64277	64277	35021	35021
AIC	57110.0	73248.3	33369.1	42743.8
BIC	57255.2	73393.5	33504.6	42879.2
Log.Lik.	-28539.009	-36608.159	-16668.569	-21355.907
F		595.142		375.230

Post Stratification Assessment

Table A2.4 shows the Hellinger distances for a set of socio-economic and demographic variables by sub-sample (before and during COVID-19). All the variables have very low values (<.05), which is the critical value to assess whether two distributions are substantially different. These results suggest that the post-stratification of the survey weights rebalanced the sample.

TABLE A2.4: **Hellinger Distances with Post-Stratified Weights Before and During Covid-19**

VARIABLE	HELLINGER DISTANCE
Sex hh	0.00038
Age hh	0.00033
Education level hh	0.00000
Urban	0.00000
floor	0.00000
roof	0.00049

APPENDIX 3:
SPATIAL STATISTICS AND SMALL AREA ESTIMATIONS

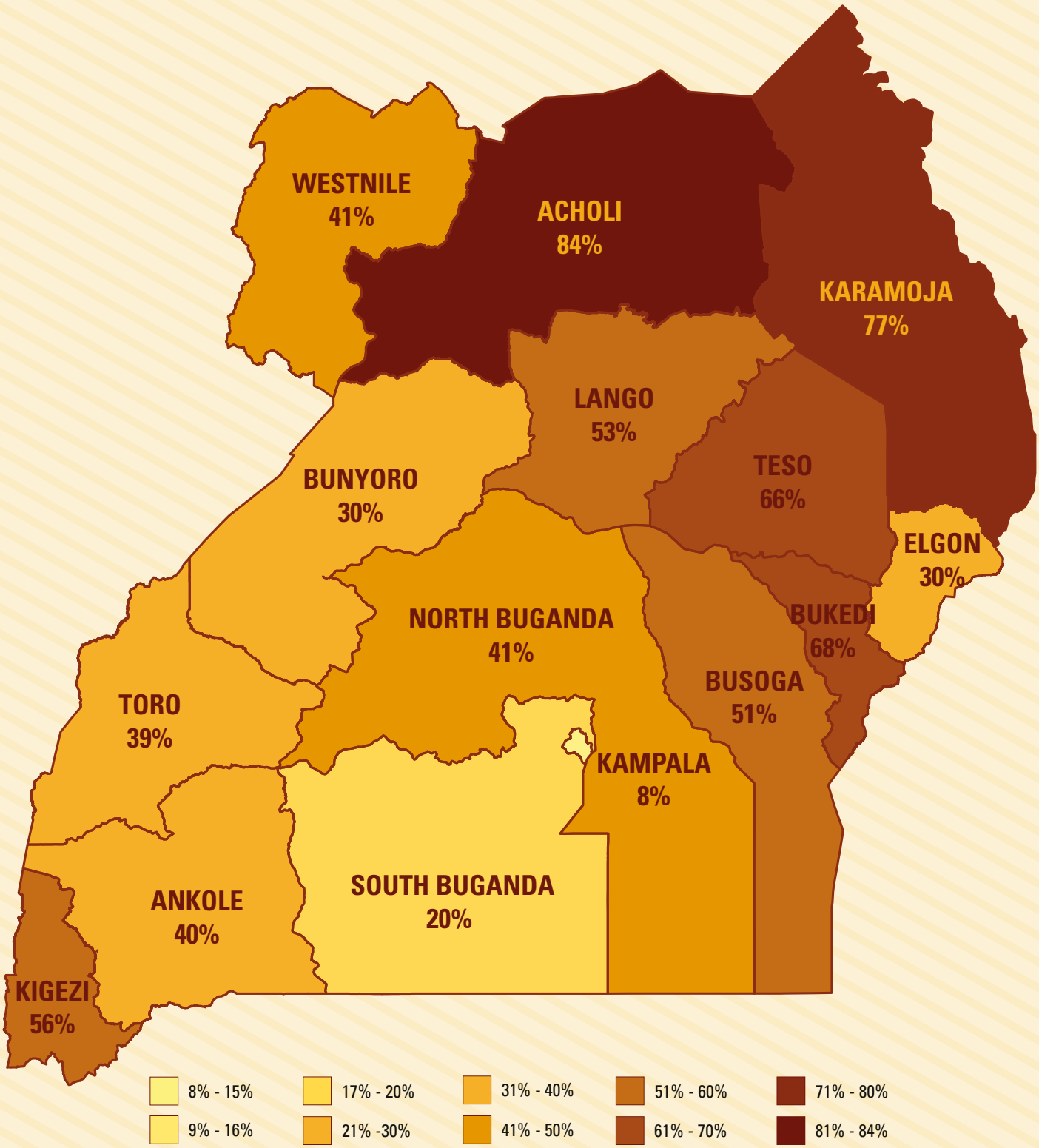
TABLE A3.1: **Point Estimates (%) of the Values of Different Predictors from the Survey and 2014 Census Data**

NAMES	CENSUS	UNCALIBRATED SURVEY	CALIBRATED SURVEY	HELLINGER*
Urban area	28	28.2	28	0
Clothes deprivation	12	9.5	11	1
Shoes deprivation	31	35.7	34	2
Roof deprivation	26	24.1	25	1
Wall deprivation	53	46.4	52	1
Latrine	9	7.6	7	3
Covered pit latrine	21	30.7	27	5
Covered pit latrine with a slab	33	38.4	36	3
Covered pit latrine without a slab	7	3.1	5	3
Uncovered pit latrine with a slab	18	10.1	13	5
Uncovered pit latrine without a slab	1	0.2	1	1
No facility	8	7	8	0
Other	1	0.2	1	1
No Television	86	82.8	85	1
Improved wáter	73	79.1	74	1
Children in HH (0)	22	19	20	2
Children in HH (>0 & <4)	47	46	47	0
Overcrowding	40	35	39	1
No Bicycle	68	76	72	3

Note: The Hellinger Distance statistic which is used to quantify the similarity of two distributions. This is zero when both distributions are perfectly matched, and a value below 5% difference is usually taken as the threshold of adequate similarity (Leulescu and Agafitei, 2013).

APPENDIX 4:

MDCP AT REGIONAL, DISTRICT AND COUNTY LEVELS 2019/20



NORTHERN REGION

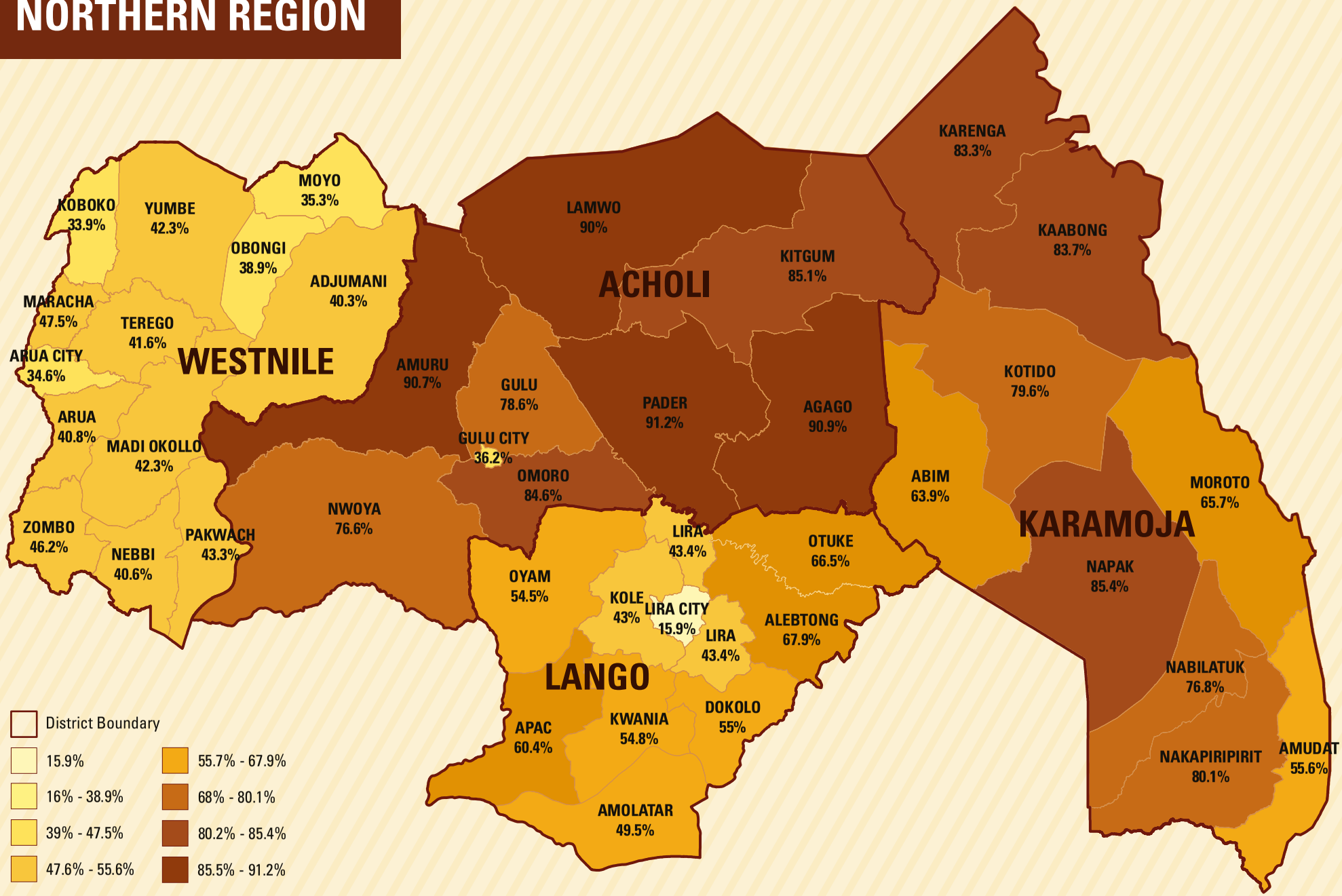


TABLE A4.1: **Multidimensional Child Poverty for Northern Region in 2019/20**

DISTRICT/COUNTY	MDCP (%)
ACHOLI SUB-REGION	**84**
Agago Disrtict	**90.9**
Agago County	90.9
Amuru District	**90.7**
Kilak County	90.7
Gulu District	**61.6**
Aswa County	78.6
Gulu Municipality	36.2
Kitgum District	**85.1**
Kitgum Municipality	50.6
Chua County	96.6
Lamwo District	**90.0**
Lamwo County	90.0
Nwoya District	**76.6**
Nwoya County	76.6
Omoro District	**84.6**
Omoro County	84.6
Pader District	**91.2**
Aruu County	91.2

DISTRICT/COUNTY	MDCP (%)
WEST NILE SUB-REGION	**41**
Adjumani District	**40.3**
East Moyo	40.3
Arua District	**39.7**
Arua Municipality	24.9
Madi Okollo County	42.3
Terego County	41.6
Vurra County	40.8
Koboko District	**33.9**
Koboko County	36.4
Koboko Municipality	29.0
Maracha District	**47.5**
Maracha County	47.5
Moyo District	**35.3**
Moyo County	35.3
Obongi District	**38.9**
Obongi County	38.9
Nebbi District	**40.6**
Nebbi Municipality	35.8
Padyere County	42.4
Pakwach Disrtict	**43.3**
Jonam County	43.3
Yumbe Disrtict	42.3
Aringa County	42.3
Zombo Disrtict	**46.2**
Okoro County	46.2

DISTRICT/COUNTY	MDCP (%)
LANGO SUB-REGION	**53**
Alebtong Disrtict	**67.9**
Moroto County	67.9
Amolatar Disrtict	**49.5**
Kioga County	49.5
Apac Disrtict	**60.4**
Apac Municipality	54.8
Maruzi County	66.0
Dokolo Disrtict	**55.0**
Dokolo County	55.0
Kole Disrtict	**43.0**
Dokolo County	55.0
Kole Disrtict	**43.0**
Kole County	43.0
Kwania Disrtict	**54.8**
Kwania County	54.8
Lira Disrtict	**34.9**
Erute County	43.4
Lira Municipality	15.9
Otuke Disrtict	**66.5**
Otuke County	66.5
Oyam Disrtict	**54.5**
Oyam County	54.5

DISTRICT/COUNTY	MDCP (%)
KARAMOJA SUB REGION	**84**
Abim Disrtict	**63.9**
Labwor County	63.9
Amudat County	55.6
Pokot County	55.6
Kaabong Disrtict	**83.6**
Dodoth	83.6
Kotido Disrtict	**79.6**
Jie County	82.9
Kotido Municipality	75.6
Moroto Disrtict	**65.7**
Matheniko County	80.4
Moroto Municipality	36.2
Nabilatuk Disrtict	**76.8**
Pian County	76.8
Nakapiripirit Disrtict	**80.1**
Chekwi County	80.1
Napak Disrtict	**85.4**
Bokora County	85.4

WESTERN REGION

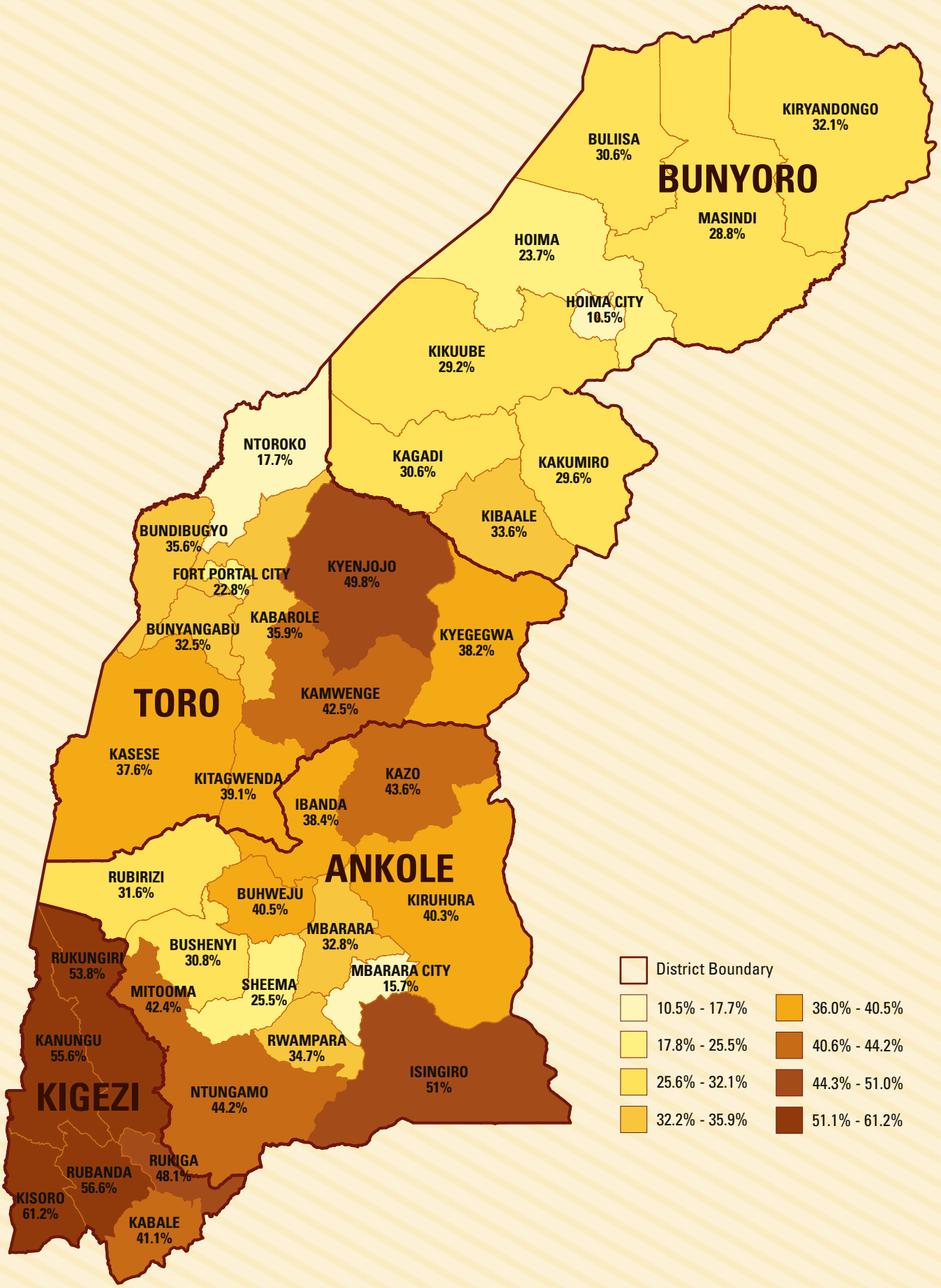
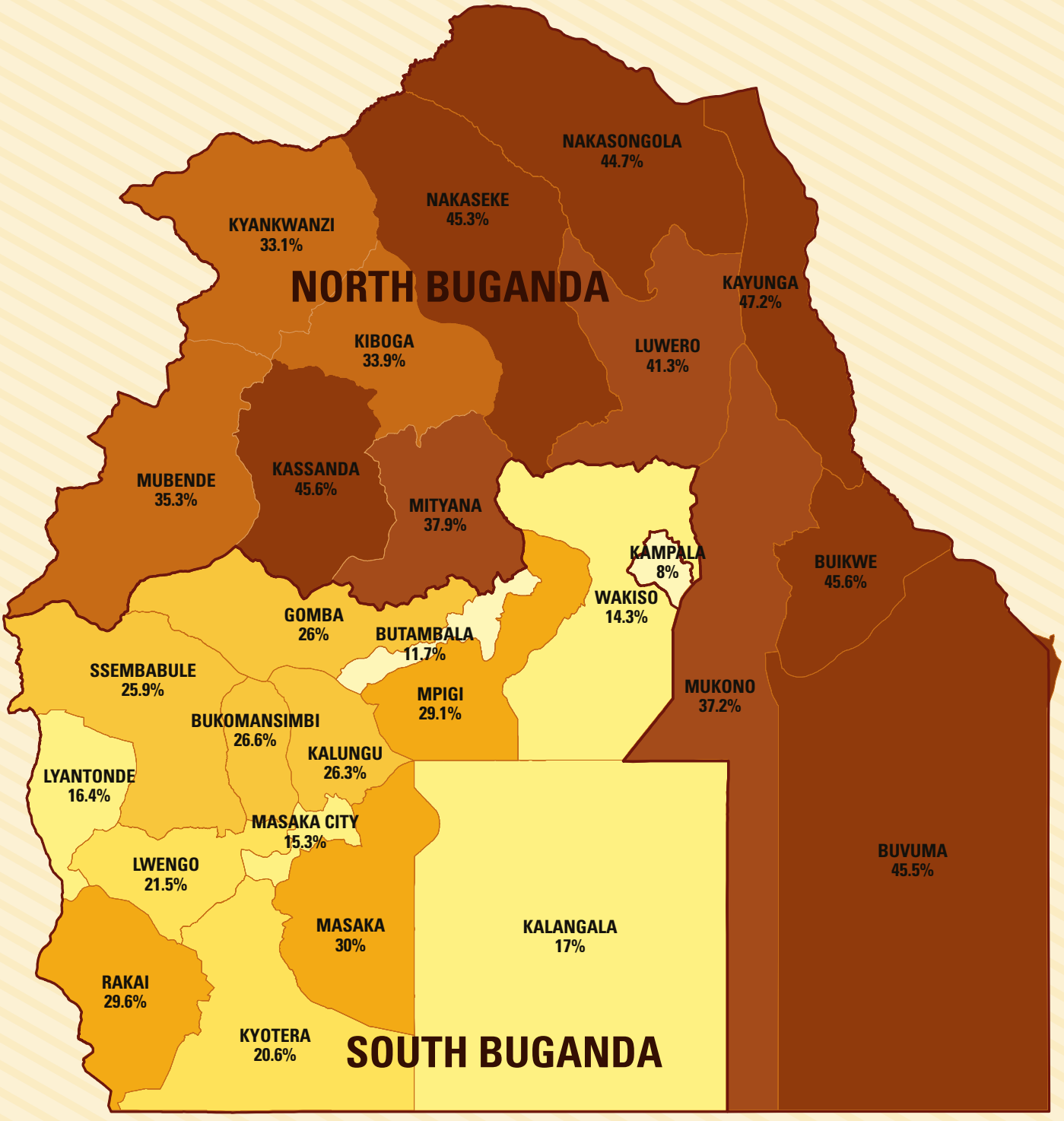


TABLE A4.2: **Multidimensional Child Poverty for Western Region in 2019/20**

DISTRICT/COUNTY	MDCP (%)
KIGEZI SUB-REGION	**56**
Kabale District	**41.4**
Kabale Municipality	22.4
Ndorwa County	46.7
Kanungu District	**55.6**
Kinkizi County	55.6
Kisoro District	**61.2**
Bufumbira County	65.5
Kisoro Municipality	41.0
Rubanda District	**56.6**
Rubanda County	56.6
Rukiga District	**48.1**
Rukiga County	48.1
Rukungiri District	**53.8**
Bujumbura County	60.9
Rubabo County	52.4
Rukungiri Municipality	39.9
ANKOLE SUB-REGION	**40**
Buhweju District	**40.5**
Buhweju County	40.5
Bushenyi District	**30.8**
Bushenyi Municipality	18.9
Igara County	34.4
Ibanda District	**38.4**
Ibanda County	39.5
Ibanda Municipality	35.3
Isingiro District	**51.0**
Bukanga County	53.5
Isingiro County	49.3
Kiruhura District	**41.8**
Kazo County	43.6
Nyabushozi County	40.3
Mbarara District	**27.2**
Kashari County	30.1
Mbarara Municipality	7.7
Mitooma District	**42.4**
Ruhinda County	42.4
Ntungamo District	**44.2**
Kajara County	45.8
Ntungamo Municipality	26.5
Ruhaama County	48.4
Rushenyi County	44.8
Rubirizi District	**31.6**
Bunyaruguru County	31.6
Sheema District	**25.5**
Sheema County	26.7
Sheema Municipality	22.4

DISTRICT/COUNTY	MDCP (%)
BUNYORO SUB-REGION	**30**
Buliisa District	**30.6**
Buliisa County	30.6
Hoima District	**18.4**
Bugahya County	23.7
Hoima Municipality	10.5
Kagadi District	**30.6**
Buyaga County	30.6
Kakumiro District	**29.6**
Bugangaizi County	29.6
Kibaale District	**33.6**
Buyanja County	33.6
Kikuube District	**29.2**
Buhaguzi County	29.2
Kiryandongo District	**32.1**
Kibanda County	32.1
Masindi District	**28.8**
Bujenje County	33.6
Buruuli County	34.0
Masindi Municipality	22.7
TORO SUB-REGION	**39**
Bundibugyo District	**35.6**
Bughendera County	35.5
Bwamba County	35.6
Bunyangabu County	32.5
Bunyangabu County	32.5
Kabarole District	**30.8**
Burahya	34.1
Fort Portal Municipality	14.6
Kamwenge District	**41.0**
Kibale County	42.5
Kitagwenda County	39.1
Kasese District	**37.6**
Bukonjo	39.1
Busongora	39.3
Kasese Municipality	22.7
Kyegegwa District	**38.2**
Kyaka County	38.2
Kyenjojo District	**49.8**
Kyaka County	38.2
Kyenjojo District	**49.8**
Mwenge County	49.8
Ntoroko District	**17.7**
Ntoroko County	17.7

CENTRAL REGION



District Boundary

7.7% - 11.7%	17.1% - 21.5%	26.7% - 30.0%	35.4% - 41.3%
11.8% - 17.0%	21.6% - 26.6%	30.1% - 35.3%	41.4% - 47.2%

TABLE A4.3: **Multidimensional Child Poverty for Central Region in 2019/20**

DISTRICT/COUNTY	MDCP (%)
BUGANDA NORTH SUB-REGION	**41**
Buikwe District	**45.6**
Buikwe County	49.7
Lugazi Municipality	38.4
Njeru Municipality	44.7
Buvuma District	**45.5**
Buvuma Island County	45.5
Kassanda District	**45.6**
Kassanda County	45.6
Kayunga District	**47.2**
Bbaale County	52.9
Ntenjeru County	42.6
Kiboga District	**33.9**
Kiboga County	33.9
Kyankwanzi District	33.1
Kyankwanzi County	33.1
Luwero District	**41.3**
Bamunanika County	48.1
Katikamu County	37.1
Mityana District	**37.9**
Busujju County	42.2
Mityana County	39.8
Mityana Municipality	26.8
Mubende District	**35.3**
Buwekula County	42.0
Kasambya County	36.8
Mubende Municipality	23.7
Mukono District	**37.2**
Mukono County	40.2
Mukono Municipality	18.5
Nakifuma County	40.0
Nakaseke District	**45.3**
Nakaseke County	45.3
Nakasongola County	44.7
Buruli County	44.7

DISTRICT/COUNTY	MDCP (%)
BUGANDA SOUTH SUB-REGION	**20**
Bukomansimbi District	**26.6**
Bukomansimbi County	26.6
Butambala District	**11.7**
Butambala County	11.7
Gomba District	**26.0**
Gomba County	26.0
Kalangala District	**17.0**
Bujumba County	17.3
Kyamuswa County	16.8
Kalungu District	**26.3**
Kalungu County	26.3
Kyotera District	**20.6**
Kyotera County	20.6
Lwengo District	**21.5**
Bukoto County	21.5
Lyantonde County	16.4
Kabula County	16.4
Masaka District	**25.1**
Bukoto County	30.0
Masaka Municipality	15.3
Mpigi County	29.1
Mawokota County	29.1
Rakai District	**29.6**
Kooki County	29.6
Ssembabule District	**25.9**
Lwemiyaga County	30.4
Mawogola County	24.4
Wakiso District	**14.3**
Busiro County	18.1
Entebbe Municipality	8.3
Kira Municipality	8.6
Kyadondo District	**11.0**
Makindye Ssabagabo Municipality	9.3
Nansana Municipality	13.1
Kampala District	**8**
Kampala	8

EASTERN REGION

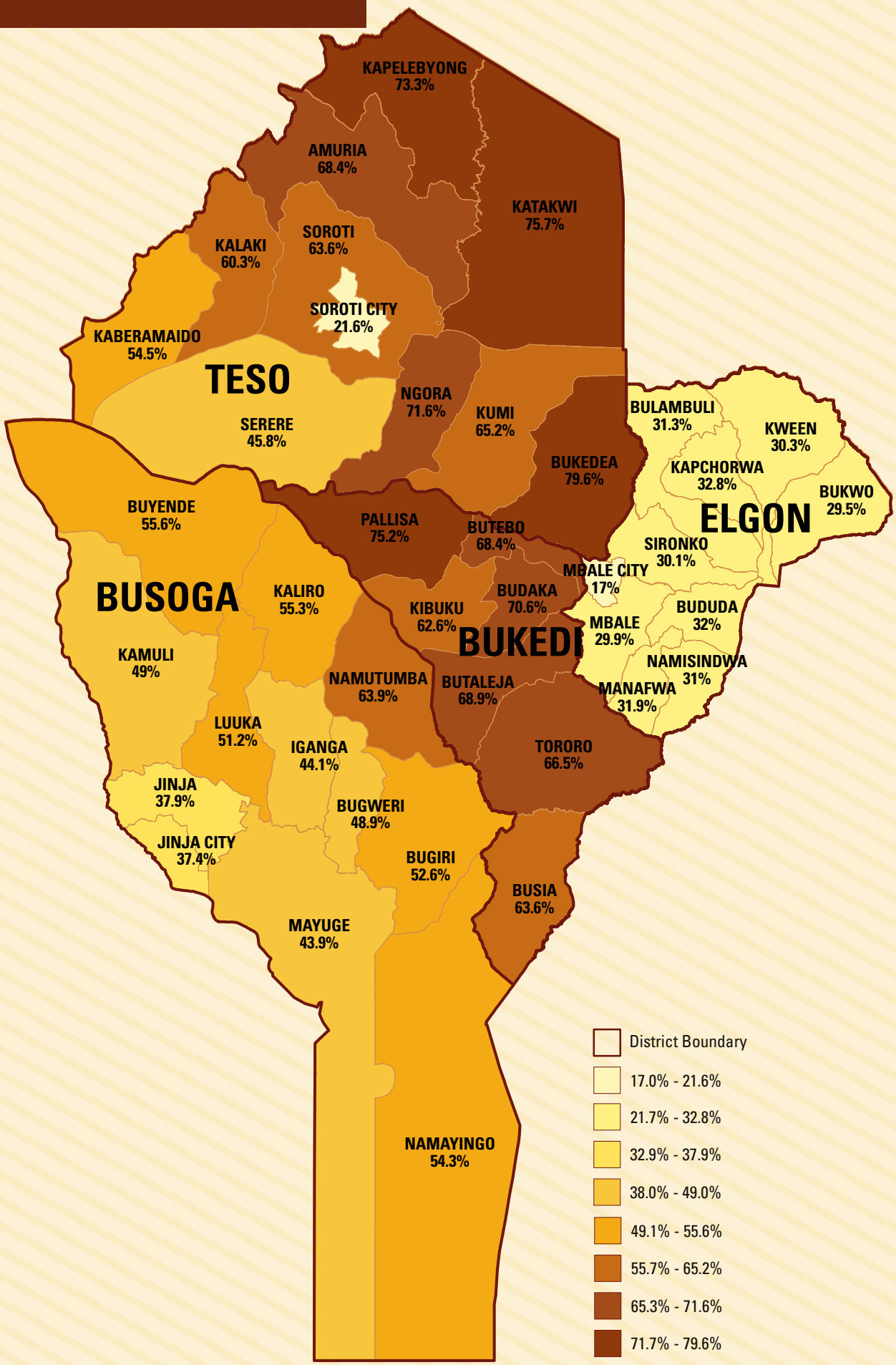


TABLE A4.4: **Multidimensional Child Poverty for Central Region in 2019/20**

DISTRICT/COUNTY	MDCP (%)
BUKEDI SUB-REGION	**68**
Budaka District	**70.6**
Budaka County	70.6
Busia District	**63.6**
Busia Municipality	41.1
Samia-Bugwe County	66.8
Butaleja District	**68.9**
Bunyole County	68.9
Butebo District	**68.4**
Butebo County	68.4
Kibuku District	**62.6**
Kibuku County	62.6
Pallisa District	**75.2**
Agule County	76.1
Kibale County	75.3
Pallisa County	74.3
Tororo District	**66.5**
Tororo County	67.9
Tororo Municipality	45.6
West Budama (Kisolo)	69.1
BUSOGA SUB-REGION	**51**
Bugiri District	**52.6**
Bugiri Municipality	33.4
Bukooli North County	56.4
Bugweri District	**48.9**
Bugweri County	48.9
Buyende District	**55.6**
Budiope County	55.6
Iganga District	**44.1**
Iganga Municipality	25.7
Kigulu County	48.7
Jinja District	**37.6**
Butembe County	34.8
Jinja Municipality	25.9
Kagoma County	46.9
Kaliro District	**55.3**
Bulamogi County	55.3
Kamuli District	**49.0**
Bugabula County	51.2
Buzaaya County	49.6
Kamuli Municipality	38.5
Luuka District	**51.2**
Luuka County	51.2
Mayuge District	**43.9**
Bunya County	43.9
Namayingo District	**54.3**
Bukooli County	54.3
Namutumba County	63.9
Busiki County	63.9

DISTRICT/COUNTY	MDCP (%)
ELGON SUB-REGION	**30**
Bududa District	**32.0**
Manjiya County	32.0
Bukwo District	**29.5**
Kongasis County	29.5
Bulambuli District	**31.3**
Bulambuli County	31.3
Kapchorwa District	**32.8**
Kapchorwa Municipality	29.6
Tingey County	33.7
Kween District	**30.3**
Kween County	30.3
Manafwa District	**31.9**
Bubulo County	31.9
Mbale District	**28.5**
Bungokho County	29.9
Mbale Municipality	17.0
Namisindwa District	**31.0**
Bubulo County	31.0
Sironko District	**30.1**
Budadiri County	30.1
TESO SUB-REGION	**66**
Amuria District	**68.4**
Amuria County	68.4
Bukedea District	**79.6**
Bukedea County	79.6
Kaberamaido District	**57.4**
Kaberamaido County	54.5
Kalaki County	60.3
Kapelebyong District	**73.3**
Kapelebyong	73.3
Katakwi District	**75.7**
Katakwi County	75.2
Toroma County	76.4
Kumi District	**65.2**
Kumi County	68.4
Kumi Municipality	55.4
Ngora District	**71.6**
Ngora County	71.6
Serere District	**45.8**
Kasilo County	47.2
Serere County	43.8
Soroti District	**51.0**
Soroti County	63.6
Soroti Municipality	21.6

ACHOLI SUB-REGION | **84%**

DISTRICT	MDCP (%)
Agago	90.9
Amuru	90.7
Gulu	61.6
Kitgum	85.1
Lamwo	90.0
Nwoya	76.6
Omoro	84.6
Pader	91.2

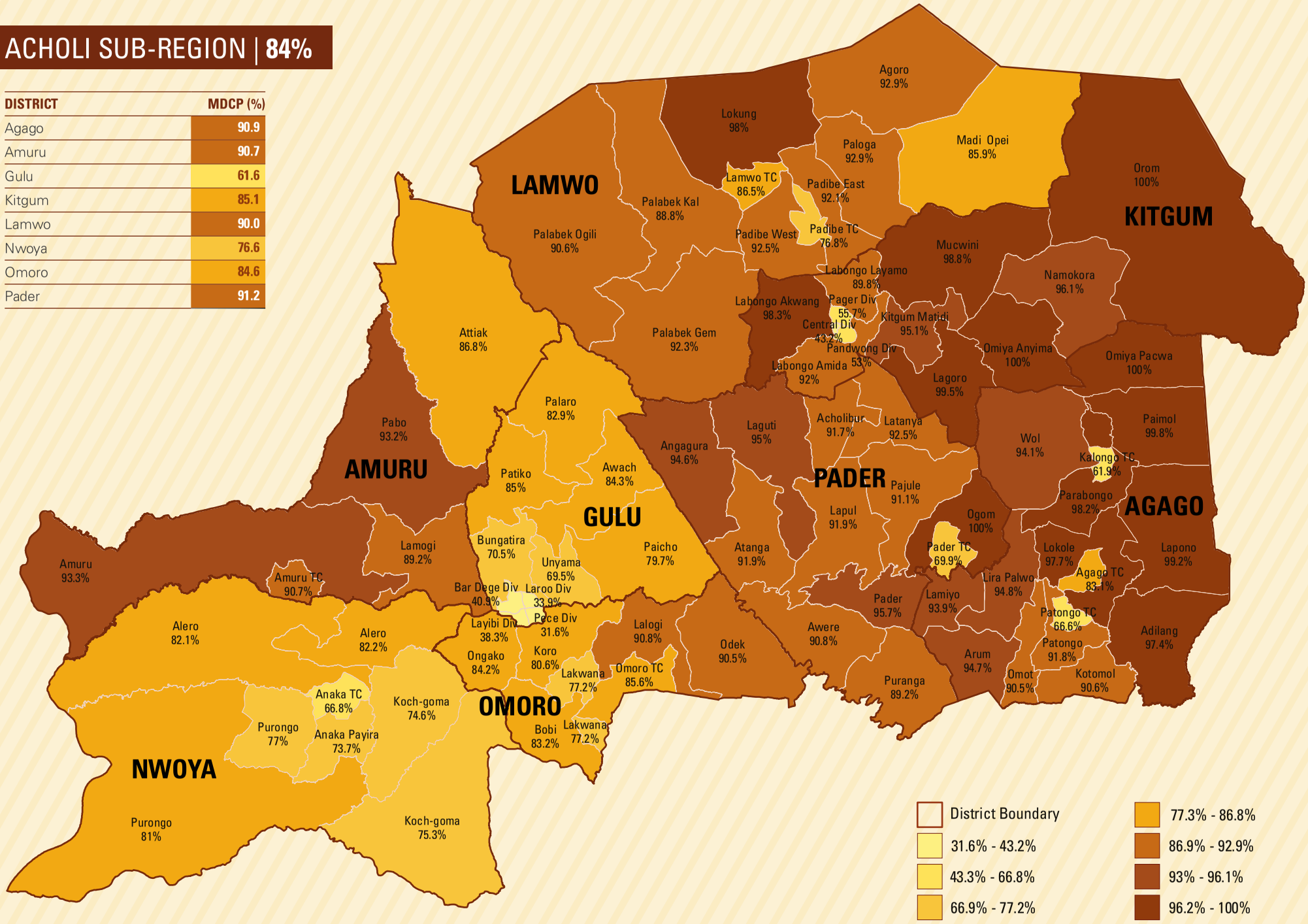


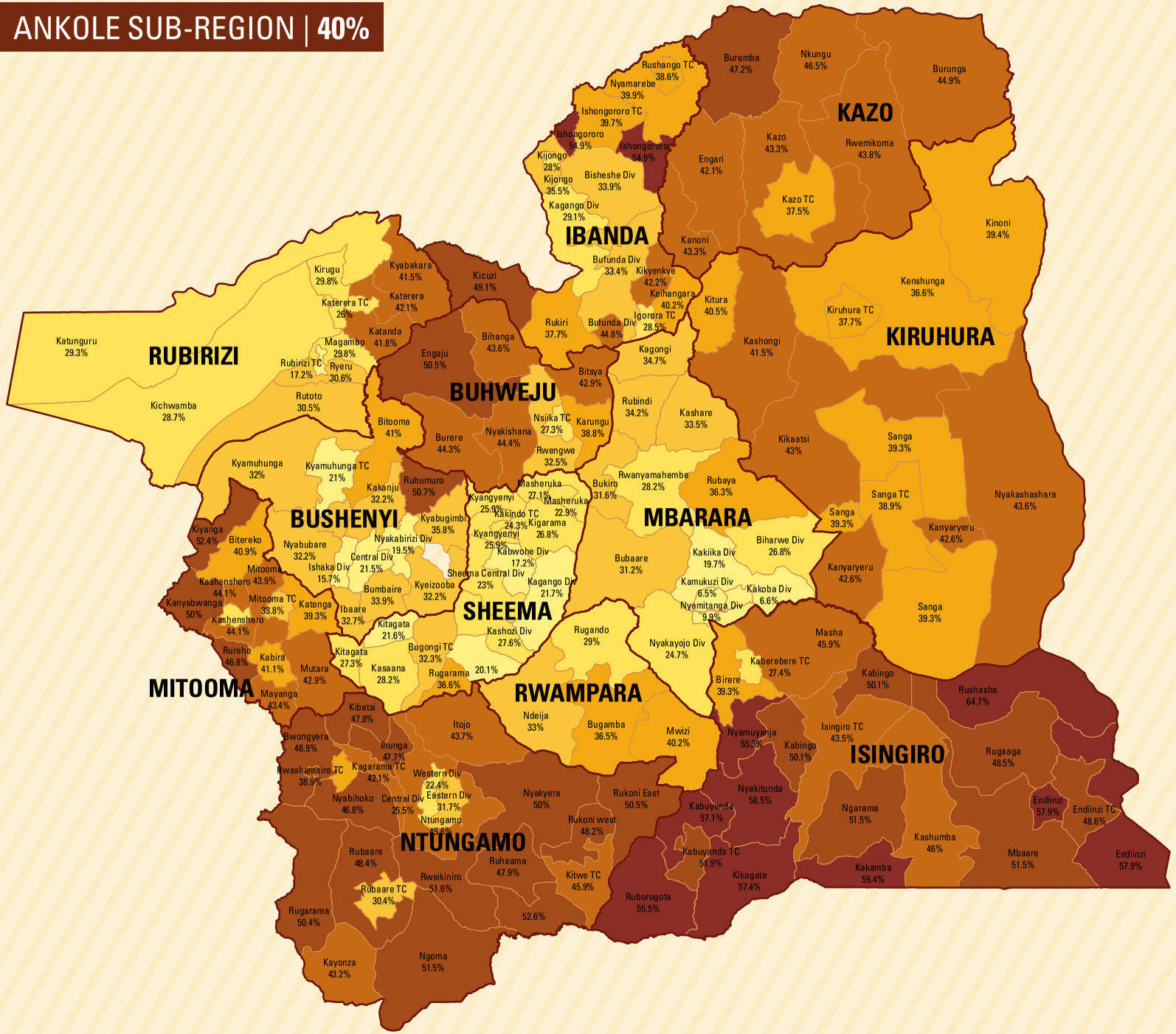
TABLE A5.1: **MD Child Poverty for Districts and Sub-counties in Acholi Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
AGAGO DISTRICT	**90.9**
Adilang	97.4
Agago Town Council	83.1
Arum	94.7
Kalongo Town Council	61.9
Kotomol	90.6
Lamiyo	93.9
Lapono	99.2
Lira Palwo	94.8
Lokole	97.7
Omiya Pacwa	99.8
Omot	90.5
Paimol	99.8
Parabongo	98.2
Patongo	91.8
Patongo Town Council	66.6
Wol	94.1
AMURU	**90.7**
Amuru	93.3
Amuru Town Council	90.7
Attiak	86.8
Lamogi	89.2
Pabo	93.2
GULU DISTRICT	**61.6**
Awach	84.3
Bar Dege Division	40.9
Bungatira	70.5
Laroo Division	33.9
Layibi Division	38.3
Paicho	79.7
Palaro	82.9
Patiko	85.0
Pece Division	31.6
Unyama	69.5

SUB-COUNTY	MDCP (%)
KITGUM DISTRICT	**85.1**
Central Division	43.2
Kitgum Matidi	95.1
Labongo Akwang	98.3
Labongo Amida	92.0
Labongo Layamo	89.8
Lagoro	99.5
Mucwini	98.8
Namokora	96.1
Omiya Anyima	99.8
Orom	99.8
Pager Division	55.7
Pandwong Division	53.0
LAMWO DISTRICT	**90.0**
Agoro	92.9
Lamwo Town Council	86.5
Lokung	98.0
Madi Opei	85.9
Padibe East	92.1
Padibe Town Council	76.8
Padibe West	92.5
Palabek Gem	92.3
Palabek Kal	88.8
Palabek Ogili	90.6
Paloga	92.9
NWOYA DISTRICT	**76.6**
Alero	82.2
Anaka Payira	73.7
Anaka Town Council	66.8
Got Apwoyo	81.0
Koch-Goma	74.6
Lii	75.3
Lungulu	82.1
Purongo	77.0

SUB-COUNTY	MDCP (%)
OMORO DISTRICT	**84.6**
Bobi	83.2
Koro	80.6
Lakwana	77.2
Lalogi	90.8
Odek	90.5
Omoro Town Council	85.6
Ongako	84.2
PADER DISTRICT	**91.2**
Acholibur	91.7
Angagura	94.6
Atanga	91.9
Awere	90.8
Laguti	95.0
Lapul	91.9
Latanya	92.5
Ogom	99.8
Pader	95.7
Pader Town Council	69.9
Pajule	91.1
Puranga	89.2

ANKOLE SUB-REGION | **40%**



DISTRICT	MDCP (%)
Buhweju	40.5
Bushenyi	30.8
Ibanda	38.4
Isingiro	51.0
Kiruhura	41.8
Mbarara	27.2
Mitooma	42.4
Ntungamo	44.2
Rubirizi	31.6
Sheema	25.5

TABLE A5.2: **MD Child Poverty for Districts and Sub-Counties of Ankole Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
BUHWEJU DISTRICT	**40.5**
Bihanga	43.6
Bitsya	42.9
Burere	44.3
Engaju	50.5
Karungu	38.8
Nsiika Town Council	27.3
Nyakishana	44.4
Rwengwe	32.5
BUSHENYI DISTRICT	**30.8**
Bitooma	41.0
Bumbaire	33.9
Central Divison	21.5
Ibaare	32.7
Ishaka Divison	15.7
Kakanju	32.2
Kyabugimbi	35.8
Kyamuhunga	32.0
Kyamuhunga Town Council	21.0
Kyeizooba	32.2
Nyabubare	32.2
Nyakabirizi Division	19.5
Ruhumuro	50.7
Rwentuha Town Council	

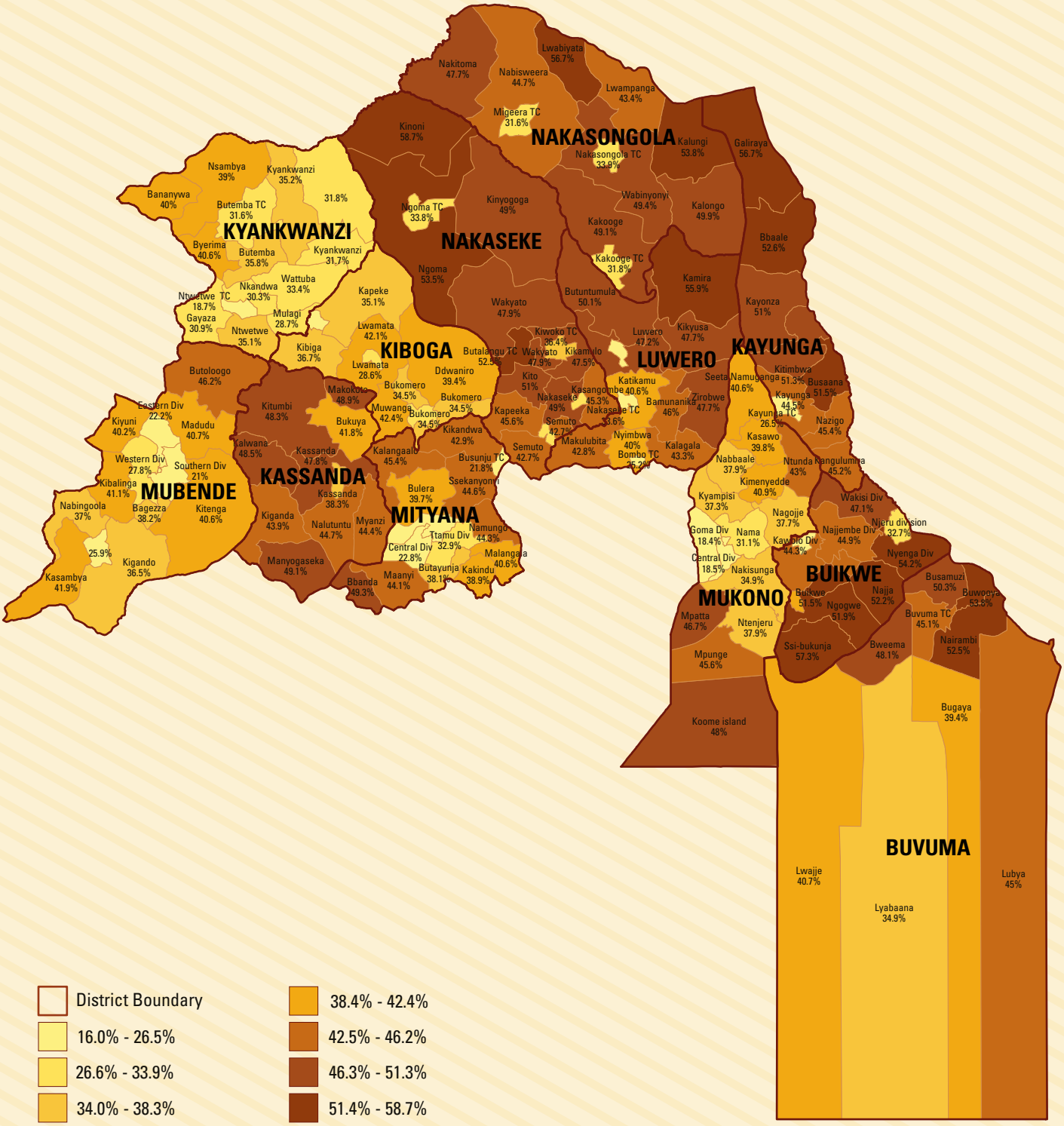
SUB-COUNTY	MDCP (%)
IBANDA DISTRICT	**38.4**
Bisheshe Division	33.9
Bufunda Division	33.4
Igorora Town Council	28.5
Ishongororo	54.9
Ishongororo Town Council	39.7
Kagango Division	29.1
Keihangara	40.2
Kicuzi	49.1
Kijongo	35.5
Kikyenkye	42.2
Nyabuhikye	44.8
Nyamarebe	39.9
Rukiri	37.7
Rushango Town Council	38.6
Rwenkoba Town Council	28.0
ISINGIRO DISTRICT	**51.0**
Birere	39.3
Endiinzi	57.9
Endiinzi Town Council	48.6
Isingiro Town Council	43.5
Kaberebere Town Council	27.4
Kabingo	50.1
Kabuyanda	57.1
Kabuyanda Town Council	51.9
Kakamba	59.4
Kashumba	46.0
Kikagate	57.4
Masha	45.9
Mbaare	51.5
Ngarama	51.5
Nyakitunda	58.5
Nyamuyanja	55.3
Ruborogota	55.5
Rugaaga	48.5
Rushasha	64.7

SUB-COUNTY	MDCP (%)
KIRUHURA DISTRICT	**41.8**
Buremba	47.2
Burunga	44.9
Engari	42.1
Kanoni	43.3
Kanyaryeru	42.6
Kashongi	41.5
Kazo	43.3
Kazo Town Council	37.5
Kenshunga	36.6
Kikaatsi	43.0
Kinoni	39.4
Kiruhura Town Council	37.7
Kitura	40.5
Nkungu	46.5
Nyakashashara	43.6
Rwemikoma	43.8
Sanga	39.3
Sanga Town Council	38.9
MBARARA DISTRICT	**27.2**
Biharwe Division	26.8
Bubaare	31.2
Bugamba	36.5
Bukiro	31.6
Kagongi	34.7
Kakiika Division	19.7
Kakoba Division	6.6
Kamukuzi Division	6.5
Kashare	33.5
Mwizi	40.2
Ndeija	33.0
Nyakayojo Division	24.7
Nyamitanga Division	9.9
Rubaya	36.3
Rubindi	34.2
Rugando	29.0
Rwanyamahembe	28.2

SUB-COUNTY	MDCP (%)
MITOOMA DISTRICT	**42.4**
Bitereko	40.9
Kabira	41.1
Kanyabwanga	50.0
Kashenshero	44.1
Kashenshero Town Council	29.6
Katenga	39.3
Kiyanga	52.4
Mayanga	43.4
Mitooma	43.9
Mitooma Town Council	33.8
Mutara	42.9
Rurehe	46.8
NTUNGAMO DISTRICT	**44.2**
Bwongyera	48.9
Central Division	25.5
Eastern Division	31.7
Ihunga	47.7
Itojo	43.7
Kafunjo-Mirama Town Council	52.6
Kagarama Town Council	42.1
Kayonza	43.2
Kibatsi	47.8
Kitwe Town Council	45.9
Ngoma	51.5
Ntungamo	45.6
Nyabihoko	46.8
Nyakyera	50.0
Nyamunuka Town Council	48.7
Rubaare	48.4
Rubaare Town Council	30.4
Rugarama	50.4
Ruhaama	47.9
Rukoni East	50.5
Rukoni West	48.2
Rwashamaire Town Council	38.9
Rweikiniro	51.6
Western Division	22.4

SUB-COUNTY	MDCP (%)
RUBIRIZI DISTRICT	**31.6**
Katanda	41.8
Katerera	42.1
Katerera Town Council	26.0
Katunguru	29.3
Kichwamba	28.7
Kirugu	29.8
Kyabakara	41.5
Magambo	29.8
Rubiriziri Town Council	17.2
Rutoto	30.5
Ryeru	30.6
SHEEMA DISTRICT	**25.5**
Bugongi Town Council	32.3
Kabwohe Division	17.2
Kagango Division	21.7
Kakindo Town Council	24.3
Kasaana	28.2
Kashozi Division	27.6
Kigarama	26.8
Kitagata	21.6
Kitagata Town Council	27.3
Kyangyenyi	25.9
Masheruka	27.1
Masheruka Twon Council	22.9
Rugarama	36.6
Sheema Central Division	23.0
Shuuku Town Council	20.1

BUGANDA NORTH SUB-REGION | 41%



District Boundary

16.0% - 26.5%

26.6% - 33.9%

34.0% - 38.3%

38.4% - 42.4%

42.5% - 46.2%

46.3% - 51.3%

51.4% - 58.7%

SUB-COUNTY	MDCP (%)
Buikwe District	45.6
Kassanda District	45.6
Kayunga District	47.2
Kiboga (33.9)	33.9
Kyankwanzi District	33.1

SUB-COUNTY	MDCP (%)
Luwero District	41.3
Mityana District	37.9
Mukono District	37.2
Nakaseke District	45.3
Nakasongola	44.7

TABLE A5.3: **MD Child Poverty for Districts and Sub-Counties in Buganda North in 2019/20**

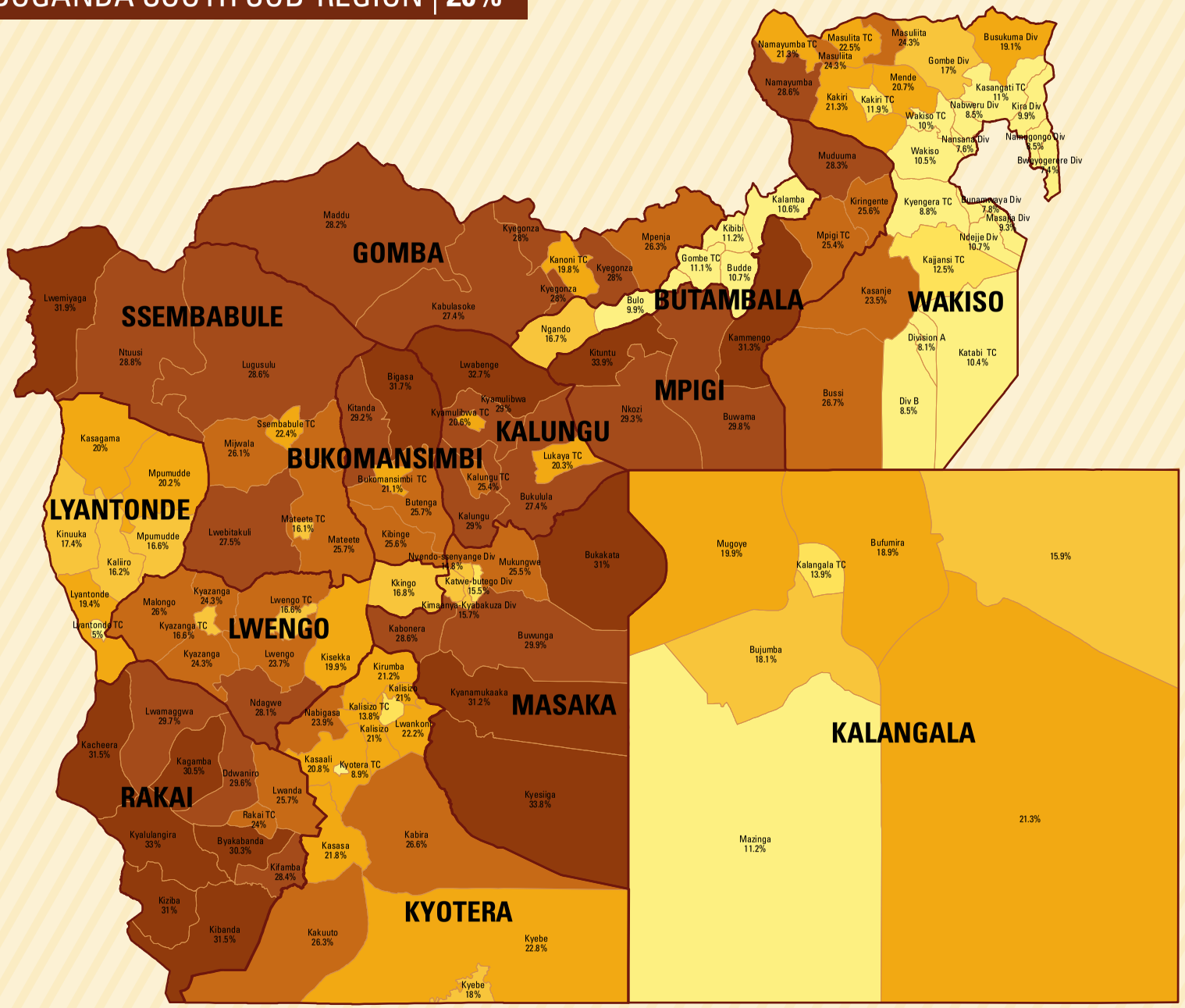
SUB-COUNTY	MDCP (%)
BUIKWE DISTRICT	**45.6**
Buikwe	51.5
Buikwe Town Council	43.3
Central Division	26.0
Kawolo Division	44.3
Najja	52.2
Najjembe Division	44.9
Ngogwe	51.9
Njeru Division	32.7
Nkokonjeru Town Council	42.1
Nyenga Division	54.2
Ssi-Bukunja	57.3
Wakisi Division	47.1
BUVUMA DISTRICT	**45.5**
Bugaya	39.4
Busamuzi	50.3
Buvuma Town Council	45.1
Buwooya	53.8
Bweema	48.1
Lubya	45.0
Lwajje	40.7
Lyabaana	34.9
Nairambi	52.5
KASSANDA DISTRICT	**45.6**
Bukuya	41.8
Kalwana	48.5
Kassanda	47.8
Kassanda Town Council	38.3
Kiganda	43.9
Kitumbi	48.3
Makokoto	48.9
Manyogaseka	49.1
Myanzi	44.4
Nalutuntu	44.7
KAYUNGA DISTRICT	**47.2**
Bbaale	52.6
Busaana	51.5
Galiraya	56.7
Kangulumira	45.2
Kayonza	51.0
Kayunga	44.5
Kayunga Town Council	26.5
Kitimbwa	51.3
Nazigo	45.4

SUB-COUNTY	MDCP (%)
KIBOGA (33.9)	**33.9**
Bukomero	34.5
Bukomero Town Council	30.5
Ddwaniro	39.4
Kapeke	35.1
Kibiga	36.7
Kiboga Town Council	16.0
Lwamata	42.1
Lwamata Town Council	28.6
Muwanga	42.4
KYANKWANZI DISTRICT	**33.1**
Bananywa	40.0
Banda	31.7
Butemba	35.8
Butemba Town Council	31.6
Byerima	40.6
Gayaza	30.9
Kyankwanzi	35.2
Kyankwanzi Town Council	31.8
Mulagi	28.7
Nkandwa	30.3
Nsambya	39.0
Ntwetwe	35.1
Ntwetwe Town Council	18.7
Wattuba	33.4
LUWERO DISTRICT	**41.3**
Bamunanika	46.0
Bombo Town Council	25.2
Butuntumula	50.1
Kalagala	43.3
Kamira	55.9
Katikamu	40.6
Kikyusa	47.7
Luwero	47.2
Luwero Town Council	26.1
Makulubita	42.8
Nyimbwa	40.0
Wobulenzi Town Council	24.9
Zirobwe	47.7

SUB-COUNTY	MDCP (%)
MITYANA DISTRICT	**37.9**
Bbanda	49.3
Bulera	39.7
Busimbi Division	24.7
Busunju Town Council	21.8
Butayunja	38.1
Central Division	22.8
Kakindu	38.9
Kalangaalo	45.4
Kikandwa	42.9
Maanyi	44.1
Malangala	40.6
Namungo	44.3
Ssekanyonyi	44.6
Ttamu Division	32.9
DISTRICT	35.3
Bagezza	38.2
Butoloogo	46.2
Eastern Division	22.2
Kasambya	41.9
Kasambya Town Council	25.9
Kibalinga	41.1
Kigando	36.5
Kitenga	40.6
Kiyuni	40.2
Madudu	40.7
Nabingoola	37.0
Southern Division	21.0
Western Division	27.8
MUKONO DISTRICT	**37.2**
Central Division	18.5
Goma Division	18.4
Kasawo	39.8
Kimenyedde	40.9
Koome Island	48.0
Kyampisi	37.3
Mpatta	46.7
Mpunge	45.6
Nabbaale	37.9
Nagojje	37.7
Nakisunga	34.9
Nama	31.1
Ntenjeru	37.9
Ntunda	43.0
Seeta Namuganga	40.6

SUB-COUNTY	MDCP (%)
NAKASEKE DISTRICT	**45.3**
Butalangu Town Council	52.5
Kapeeka	45.6
Kasangombe	45.3
Kikamulo	47.5
Kinoni	58.7
Kinyogoga	49.0
Kito	51.0
Kiwoko Town Council	36.4
Nakaseke	49.0
Nakaseke Town Council	33.6
Ngoma	53.5
Ngoma Town Council	33.8
Semuto	42.7
Semuto Town Council	32.4
Wakyato	47.9
NAKASONGOLA	**44.7**
Kakooge	49.1
Kakooge Town Council	31.8
Kalongo	49.9
Kalungi	53.8
Lwabiyata	56.7
Lwampanga	43.4
Migeera Town Council	31.6
Nabisweera	44.7
Nakasongola Town Council	33.9
Nakitoma	47.7
Wabinyonyi	49.4

BUGANDA SOUTH SUB-REGION | 20%



- District Boundary
- 5.0% - 11.2%
- 11.3% - 14.8%
- 14.9% - 18.1%
- 18.2% - 22.8%
- 22.9% - 26.7%
- 26.8% - 29.9%
- 30.0% - 33.9%

DISTRICT	MDCP (%)
Bukomansimbi	26.6
Butambala	11.7
Gomba	26.0
Kalangala	17.0
Kalungu	26.3
Kyotera	20.6
Lwengo	21.5
Lyantonde	16.4
Masaka	25.1
Mpigi	29.1
Rakai	29.6
Ssembabule	25.9
Wakiso	14.3

TABLE A5.4: **MD Child Poverty for Districts and Sub-Counties in Buganda South Sub-Region in 2019/20**

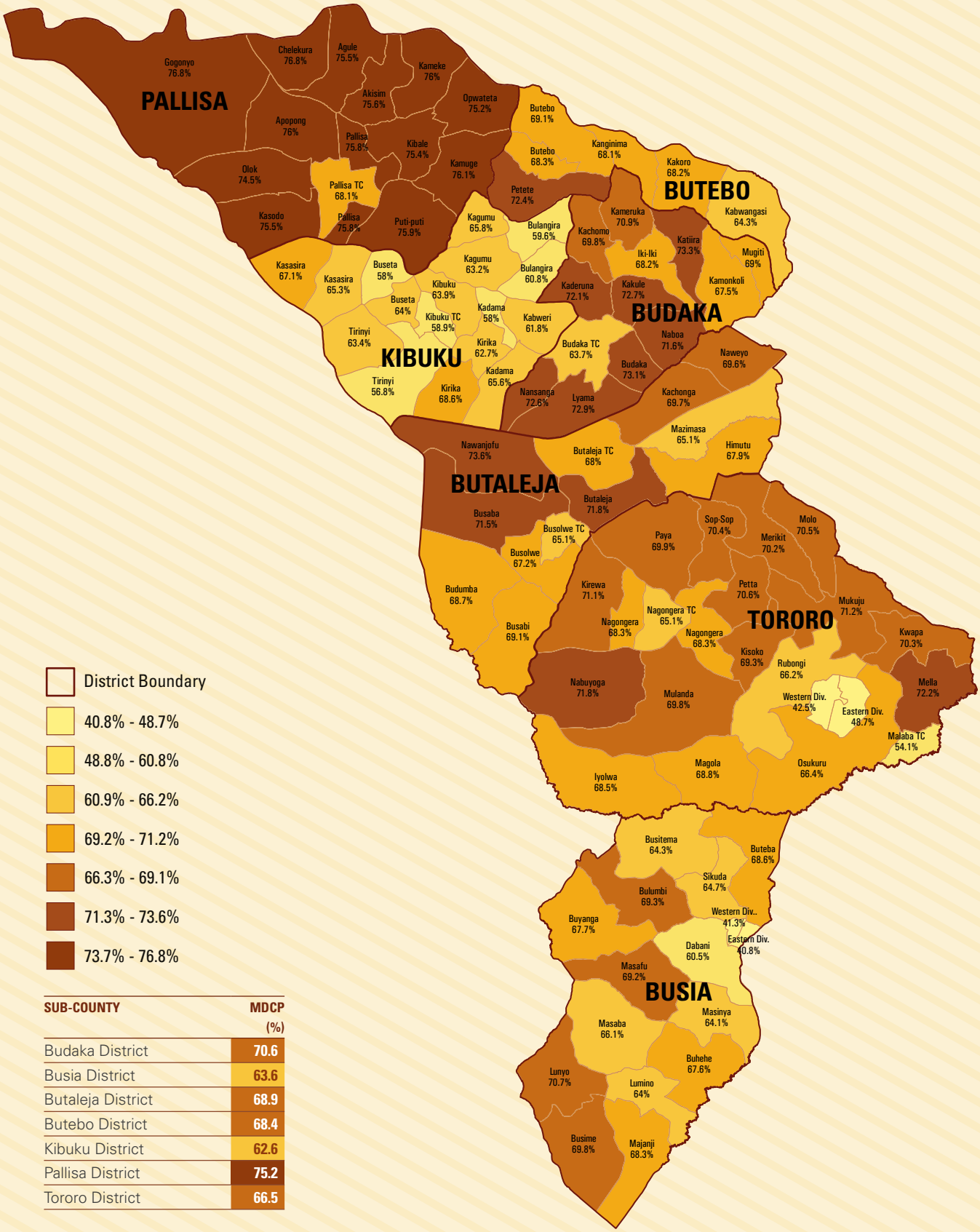
SUB-COUNTY	MDCP (%)
BUKOMANSIMBI DISTRICT	**26.6**
Bigasa	31.7
Bukomansimbi Town Council	21.1
Butenga	25.7
Kibinge	25.6
Kitanda	29.2
BUTAMBALA DISTRICT	**11.7**
Budde	10.7
Bulo	9.9
Gombe Town Council	11.1
Kalamba	10.6
Kibibi	11.2
Ngando	16.7
GOMBA DISTRICT	**26.0**
Kabulasoke	27.4
Kanoni Town Council	19.8
Kyegonza	28.0
Maddu	28.2
Mpenja	26.3
KALANGALA DISTRICT	**17.0**
Bubeke	15.9
Bufumira	18.9
Bujumba	18.1
Kalangala Town Council	13.9
Kyamuswa	21.3
Mazinga	11.2
Mugoye	19.9
KALUNGU DISTRICT	**26.3**
Bukulula	27.4
Kalungu	29.0
Kalungu Town Council	25.4
Kyamulibwa	29.0
Kyamulibwa Town Council	20.6
Lukaya Town Council	20.3
Lwabenge	32.7

SUB-COUNTY	MDCP (%)
KYOTERA DISTRICT	**20.6**
Kabira	26.6
Kakuuto	26.3
Kalisizo	21.0
Kalisizo Town Council	13.8
Kasaali Town Council	20.8
Kasasa	21.8
Kirumba	21.2
Kyebe	22.8
Kyotera Town Council	8.9
Lwankoni	22.2
Nabigasa	23.9
Nangoma	18.0
LWENGO DISTRICT	**21.5**
Kisekka	19.9
Kkingo	16.8
Kyazanga	24.3
Kyazanga Town Council	16.6
Lwengo	23.7
Lwengo Town Council	16.6
Malongo	26.0
Ndagwe	28.1
LYANTONDE DISTRICT	**16.4**
Kaliiro	16.2
Kasagama	20.0
Kinuuka	17.4
Lyakajura	20.2
Lyantonde	19.4
Lyantonde Town Council	5.0
Mpumudde	16.6

SUB-COUNTY	MDCP (%)
MASAKA DISTRICT	**25.1**
Bukakata	31.0
Buwunga	29.9
Kabonera	28.6
Katwe-Butego Division	15.5
Kimaanya-Kyabakuza Division	15.7
Kyanamukaaka	31.2
Kyesiiga	33.8
Mukungwe	25.5
Nyendo-Ssenyange Division	14.8
MPIGI DISTRICT	**29.1**
Buwama	29.8
Kammengo	31.3
Kiringente	25.6
Kituntu	33.9
Mpigi Town Council	25.4
Muduuma	28.3
Nkozi	29.3
RAKAI DISTRICT	**29.6**
Byakabanda	30.3
Ddwaniro	29.6
Kacheera	31.5
Kagamba	30.5
Kibanda	31.5
Kifamba	28.4
Kiziba	31.0
Kyalulangira	33.0
Lwamaggwa	29.7
Lwanda	25.7
Rakai Town Council	24.0

SUB-COUNTY	MDCP (%)
SSEMBABULE DISTRICT	**25.9**
Lugusulu	28.6
Lwebitakuli	27.5
Lwemiyaga	31.9
Mateete	25.7
Mateete Town Council	16.1
Mijwala	26.1
Ntuusi	28.8
Sembabule Town Council	22.4
WAKISO DISTRICT	**14.3**
Bunamwaya Division	7.8
Bussi	26.7
Busukuma Division	19.1
Bweyogerere Division	7.4
Division A	8.1
Division B	8.5
Gombe Division	17.0
Kajjansi Town Council	12.5
Kakiri	21.3
Kakiri Town Council	11.9
Kasangati Town Council	11.0
Kasanje	23.5
Katabi Town Council	10.4
Kira Division	9.9
Kyengera Town Council	8.8
Masajja Division	9.3
Masuliita	24.3
Masulita Town Council	22.5
Mende	20.7
Nabweru Division	8.5
Namayumba	28.6
Namayumba Town Council	21.3
Namugongo Division	8.5
Nansana Division	7.6
Ndejje Division	10.7
Wakiso	10.5
Wakiso Town Council	10.0

BUKEDI SUB-REGION | **41%**



District Boundary

40.8% - 48.7%

48.8% - 60.8%

60.9% - 66.2%

69.2% - 71.2%

66.3% - 69.1%

71.3% - 73.6%

73.7% - 76.8%

SUB-COUNTY	MDCP (%)
Budaka District	70.6
Busia District	63.6
Butaleja District	68.9
Butebo District	68.4
Kibuku District	62.6
Pallisa District	75.2
Tororo District	66.5

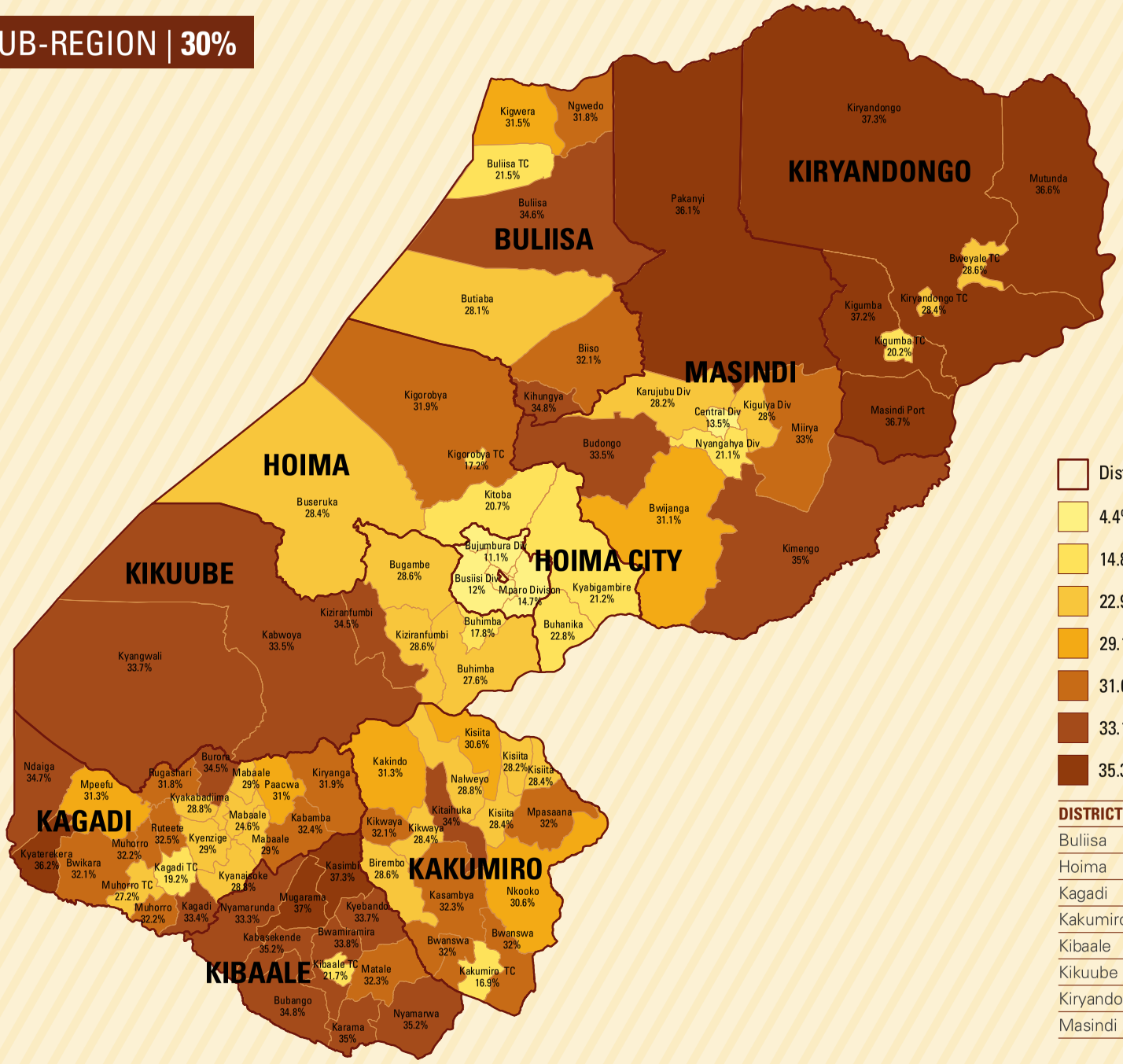
TABLE A5.5: **MD Child Poverty in Districts and Sub-Counties in Bukedi Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
BUDAKA DISTRICT	**70.6**
Budaka	73.1
Budaka Town Council	63.7
Iki-Iki	68.2
Kachomo	69.8
Kaderuna	72.1
Kakule	72.7
Kameruka	70.9
Kamonkoli	67.5
Katiira	73.3
Lyama	72.9
Mugiti	69.0
Naboa	71.6
Nansanga	72.6
BUSIA DISTRICT	**63.6**
Buhehe	67.6
Bulumbi	69.3
Busime	69.8
Busitema	64.3
Buteba	68.6
Buyanga	67.7
Dabani	60.5
Eastern Division	40.8
Lumino	64.0
Lunyo	70.7
Majanji	68.3
Masaba	66.1
Masafu	69.2
Masinya	64.1
Sikuda	64.7
Western Division	41.3
BUTALEJA DISTRICT	**68.9**
Budumba	68.7
Busaba	71.5
Busabi	69.1
Busolwe	67.2
Busolwe Town Council	65.1
Butaleja	71.8
Butaleja Town Council	68.0
Himutu	67.9
Kachonga	69.7
Mazimasa	65.1
Nawanjofu	73.6
Naweyo	69.6

SUB-COUNTY	MDCP (%)
BUTEBO DISTRICT	**68.4**
Butebo	69.1
Butebo Town Council	68.3
Kabwangasi	64.3
Kakoro	68.2
Kanginima	68.1
Petete	72.4
KIBUKU DISTRICT	**62.6**
Bulangira	59.6
Buseta	58.0
Goli Goli	65.8
Kabweri	61.8
Kadama	58.0
Kagumu	63.2
Kakutu	60.8
Kasasira	65.3
Kibuku	63.9
Kibuku Town Council	58.9
Kirika	68.6
Kituti	64.0
Lwamata	63.4
Nabiswa	62.7
Nandere	65.6
Nankondo	67.1
Tirinyi	56.8
PALLISA DISTRICT	**75.2**
Agule	75.5
Akisim	75.6
Apopong	76.0
Chelekura	76.8
Gogonyo	76.8
Kameke	76.0
Kamuge	76.1
Kasodo	75.5
Kibale	75.4
Olok	74.5
Opwateta	75.2
Pallisa	75.8
Pallisa Town Council	68.1
Puti-Puti	75.9

SUB-COUNTY	MDCP (%)
TORORO DISTRICT	**66.5**
Eastern Division	48.7
Iyolwa	68.5
Kirewa	71.1
Kisoko	69.3
Kwapa	70.3
Magola	68.8
Malaba Town Council	54.1
Mella	72.2
Merikit	70.2
Molo	70.5
Mukuju	71.2
Mulanda	69.8
Nabuyoga	71.8
Nagongera	68.3
Nagongera Town Council	65.1
Osukuru	66.4
Paya	69.9
Petta	70.6
Rubongi	66.2
Sop-Sop	70.4
Western Division	42.5

BUNYORO SUB-REGION | 30%



District Boundary

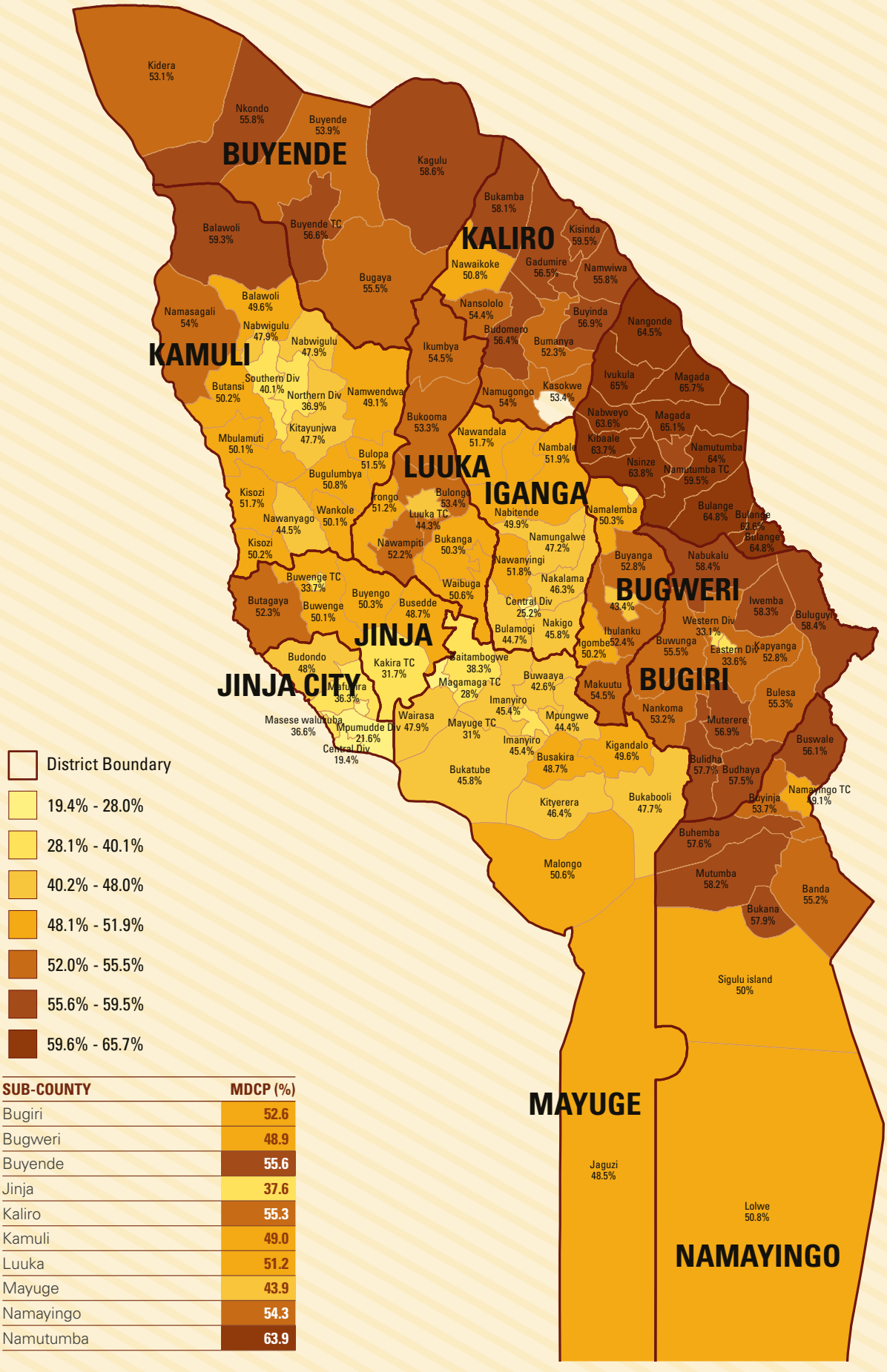
- 4.4% - 14.7%
- 14.8% - 22.8%
- 22.9% - 29.0%
- 29.1% - 31.5%
- 31.6% - 33.0%
- 33.1% - 35.2%
- 35.3% - 37.3%

DISTRICT	MDCP (%)
Buliisa	30.6
Hoima	18.4
Kagadi	30.6
Kakumiro	29.6
Kibaale	29.3
Kikuube	29.2
Kiryandongo	32.1
Masindi	28.8

TABLE A5.6: **MD Child Poverty in Districts and Sub-Counties in Bunyoro Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
BULIISA DISTRICT	**30.6**
Biiso	32.1
Buliisa	34.6
Buliisa Town Council	21.5
Butiaba	28.1
Kigwera	31.5
Kihungya	34.8
Ngwedo	31.8
HOIMA DISTRICT (18.4)	**18.4**
Buhanika	22.8
Bujumbura Division	11.1
Buseruka	28.4
Busiisi Division	12.0
Kahoora Divison	4.4
Kigorobya	31.9
Kigorobya Town Council	17.2
Kitoba	20.7
Kyabigambire	21.2
Mparo Divison	14.7
KAGADI DISTRICT	**30.6**
Burora	34.5
Bwikara	32.1
Kabamba	32.4
Kagadi	33.4
Kagadi Town Council	19.2
Kiryanga	31.9
Kyakabadiima	28.8
Kyanaisoke	28.8
Kyaterekera	36.2
Kyenzige	29.0
Mabaale	29.0
Mabaale Town Council	24.6
Mpeefu	31.3
Muhorro	32.2
Muhorro Town Council	27.2
Ndaiga	34.7
Paacwa	31.0
Rugashari	31.8
Ruteete	32.5
KAKUMIRO DISTRICT	**29.6**
Birembo	28.6
Bwanswa	32.0
Kakindo	31.3
Kakumiro Town Council	16.9
Kasambya	32.3
Katikara	30.6
Kijangi	28.4
Kikwaya	32.1
Kisiita	28.4
Kisiita Town Council	28.2
Kitaihuka	34.0
Mpasaana	32.0
Nalweyo	28.8
Nkooko	30.6
KIBAALE DISTRICT	**29.2**
Bubango	34.8
Bwamiramira	33.8
Kabasekende	35.2
Karama	35.0
Kasimbi	37.3
Kibaale Town Council	21.7
Kyebando	33.7
Matale	32.3
Mugarama	37.0
Nyamarunda	33.3
Nyamarwa	35.2
KIKUUBE DISTRICT	**29.2**
Bugambe	28.6
Buhimba	27.6
Buhimba Town Council	17.8
Kabwoya	33.5
Kikuube Town Council	28.6
Kiziranfumbi	34.5
Kyangwali	33.7
KIRYANDONGO DISTRICT	**32.1**
Bweyale Town Council	28.6
Kigumba	37.2
Kigumba Town Council	20.2
Kiryandongo	37.3
Kiryandongo Town Council	28.4
Masindi Port	36.7
Mutunda	36.6
MASINDI DISTRICT	**28.8**
Budongo	33.5
Bwijanga	31.1
Central Division	13.5
Karujubu Division	28.2
Kigulya Division	28.0
Kimengo	35.0
Miirya	33.0
Nyangahya Division	21.1
Pakanyi	36.1

BUSOGA SUB-REGION | 51%



SUB-COUNTY	MDCP (%)
Bugiri	52.6
Bugweri	48.9
Buyende	55.6
Jinja	37.6
Kaliro	55.3
Kamuli	49.0
Luuka	51.2
Mayuge	43.9
Namayingo	54.3
Namutumba	63.9

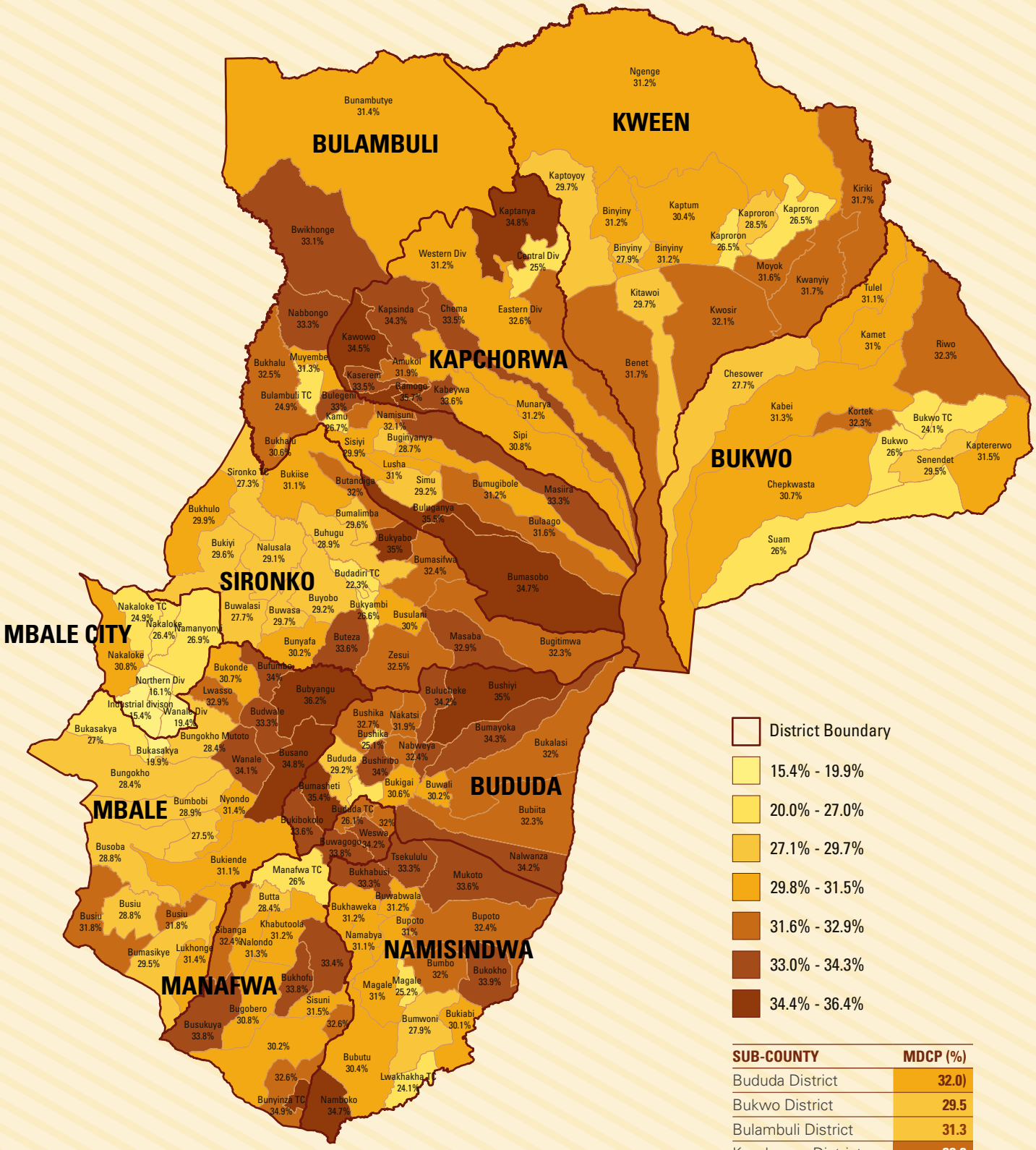
TABLE A5.7: **MD Child Poverty in Districts and Sub-Counties in Busoga Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
BUGIRI DISTRICT	**52.6**
Budhaya	57.5
Bulesa	55.3
Bulidha	57.7
Buluguyi	58.4
Buwunga	55.5
Eastern Division	33.6
Iwemba	58.3
Kapyanga	52.8
Muterere	56.9
Nabukalu	58.4
Nankoma	53.2
Western Division	33.1
BUGWERI DISTRICT	**48.9**
Bugweri Town Council	43.4
Busembatia Town Council	39.1
Buyanga	52.8
Ibulanku	52.4
Igombe	50.2
Makuutu	54.5
Namalemba	50.3
BUYENDE DISTRICT	**55.6**
Bugaya	55.5
Buyende	53.9
Buyende Town Council	56.6
Kagulu	58.6
Kidera	53.1
Nkondo	55.8
IGANGA DISTRICT	44.1
Bulamogi	44.7
Central Division	25.2
Nabitende	49.9
Nakalama	46.3
Nakigo	45.8
Nambale	51.9
Namungalwe	47.2
Nawandala	51.7
Nawanyingi	51.8
Northern Division	26.2
JINJA DISTRICT	**37.6**
Budondo	48.0
Bugembe Town Council	22.6
Busedde	48.7
Butagaya	52.3
Buwenge	50.1
Buwenge Town Council	33.7
Buyengo	50.3
Central Division	19.4
Kakira Town Council	31.7
Mafubira	36.3
Masese Walukuba	36.6
Mpumudde Division	21.6

SUB-COUNTY	MDCP (%)
KALIRO DISTRICT	**55.3**
Budomero	56.4
Bukamba	58.1
Bumanya	52.3
Buyinda	56.9
Gadumire	56.5
Kaliro Town Council	
Kasokwe	53.4
Kisinda	59.5
Namugongo	54.0
Namwiwa	55.8
Nansololo	54.4
Nawaikoke	50.8
KAMULI DISTRICT	**49.0**
Balawoli	49.6
Bugulumbya	50.8
Bulopa	51.5
Butansi	50.2
Kagumba	59.3
Kisozi	51.7
Kitayunjwa	47.7
Magogo	50.2
Mbulamuti	50.1
Nabwigulu	47.9
Namasagali	54.0
Namwendwa	49.1
Nawanyago	44.5
Northern Division	36.9
Southern Division	40.1
Wankole	50.1
LUUKA DISTRICT	**51.2**
Bukanga	50.3
Bukooma	53.3
Bulongo	53.4
Ikumbya	54.5
Irongo	51.2
Luuka Town Council	44.3
Nawampiti	52.2
Waibuga	50.6

SUB-COUNTY	MDCP (%)
MAYUGE DISTRICT	**43.9**
Baitambogwe	38.3
Bukabooli	47.7
Bukatube	45.8
Busakira	48.7
Buwaaya	42.6
Imanyiro	45.4
Jaguzi	48.5
Kigandalo	49.6
Kityerera	46.4
Magamaga Town Council	28.0
Malongo	50.6
Mayuge Town Council	31.0
Mpungwe	44.4
Wairasa	47.9
NAMAYINGO DISTRICT	**54.3**
Banda	55.2
Buhemba	57.6
Bukana	57.9
Buswale	56.1
Buyinja	53.7
Lolwe	50.8
Mutumba	58.2
Namayingo Town Council	49.1
Sigulu Island	50.0
NAMUTUMBA DISTRICT	**63.9**
Bugobi Town Council	63.6
Bulange	64.8
Ivukula	64.5
Kibaale	63.7
Magada	65.1
Mazuba	65.7
Nabweyo	63.6
Namutumba	64.0
Namutumba Town Council	59.5
Nangonde	65.0
Nsinze	63.8

ELGON SUB-REGION | 30%



SUB-COUNTY	MDCP (%)
Bududa District	32.0)
Bukwo District	29.5
Bulambuli District	31.3
Kapchorwa District	32.8
Kween District	30.3
Manafwa District	31.9
Mbale District	28.5
Namisindwa District	31.3
Sironko District	30.1

TABLE A5.8: **MD Child Poverty for Districts and Sub-Counties in Elgon Sub-Region in 2019/20**

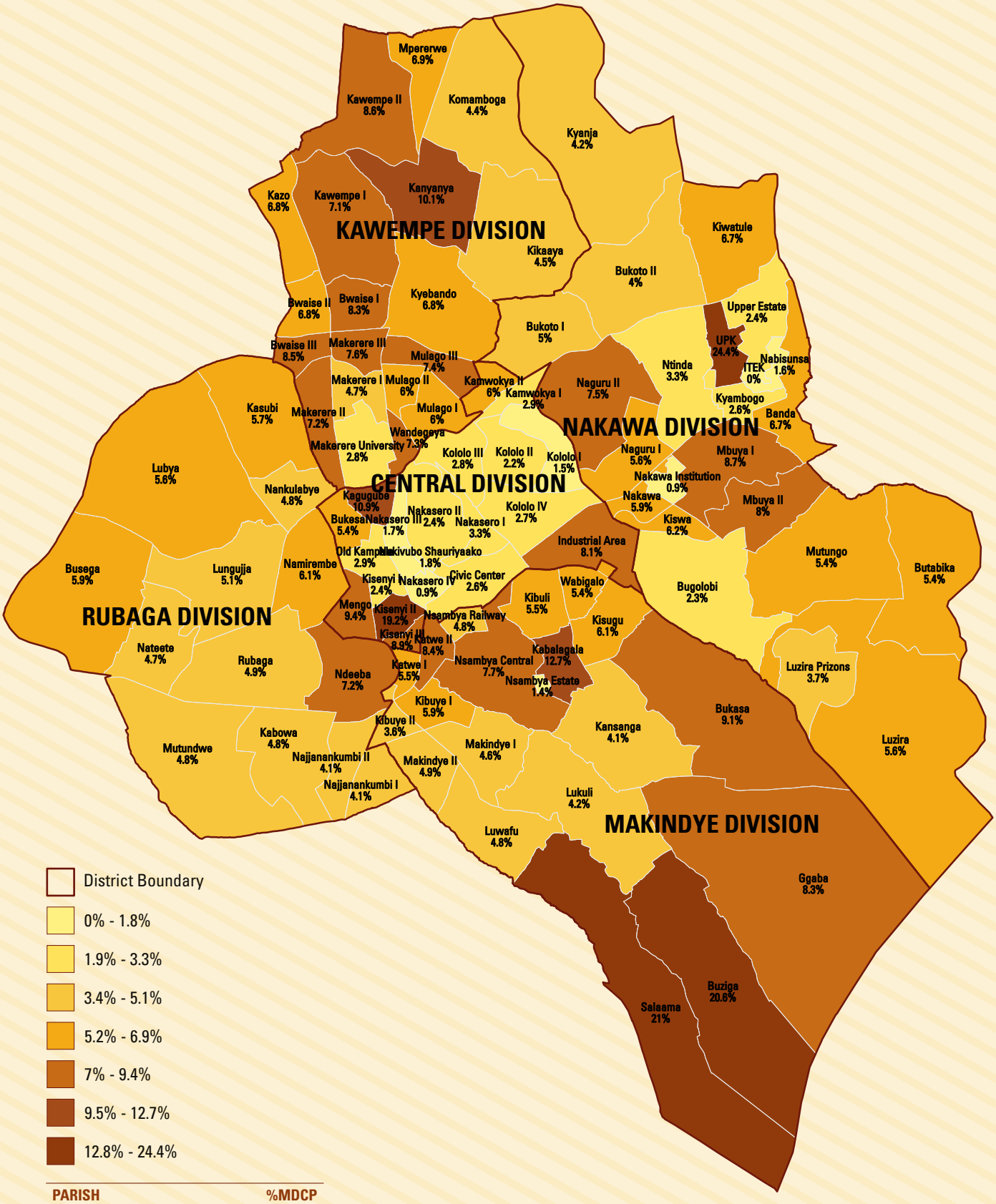
SUB-COUNTY	MDCP (%)
BUDUDA DISTRICT	**32.0)**
Bubiita	32.3
Bududa	29.2
Bududa Town Council	26.1
Bukalasi	32.0
Bukibokolo	33.6
Bukigai	30.6
Bulucheke	34.2
Bumasheti	35.4
Bumayoka	34.3
Bushika	32.7
Bushiribo	34.0
Bushiyi	35.0
Buwali	30.2
Nabweya	32.4
Nakatsi	31.9
Nalwanza	34.2
Nangako Town Council	25.1
BUKWO DISTRICT	**29.5**
Bukwo	26.0
Bukwo Town Council	24.1
Chepkwasta	30.7
Chesower	27.7
Kabei	31.3
Kamet	31.0
Kapterer wo	31.5
Kortek	32.3
Riwo	32.3
Senendet	29.5
Suam	26.0
Tulel	31.1
BULAMBULI DISTRICT	**31.3**
Buginyanya	28.7
Bukhalu	32.5
Bulaago	31.6
Bulambuli Town Council	24.9
Bulegeni	33.0
Bulegeni Town Council	32.1
Buluganya	35.5
Bumasobo	34.7
Bumugibole	31.2
Bunambutye	31.4
Buyaga Town Council	30.6
Bwikhonge	33.1
Kamu	26.7
Lusha	31.0
Masiira	33.3
Muyembe	31.3
Nabbongo	33.3
Namisuni	32.1
Simu	29.2
Sisiyi	29.9

SUB-COUNTY	MDCP (%)
KAPCHORWA DISTRICT	**32.8**
Amukol	31.9
Central Division	25.0
Chema	33.5
Chepterech	36.4
Eastern Division	32.6
Gamogo	35.7
Kabeywa	33.6
Kapsinda	34.3
Kaptanya	34.8
Kaserem	33.5
Kawowo	34.5
Munarya	31.2
Sipi	30.8
Western Division	31.2
KWEEN DISTRICT	**30.3**
Benet	31.7
Binyiny	31.2
Binyiny Town Council	27.9
Kaproron	26.5
Kaproron Town Council	28.5
Kaptoyoy	29.7
Kaptum	30.4
Kiriki	31.7
Kitawoi	29.7
Kwanyiy	31.7
Kwosir	32.1
Moyok	31.6
Ngenge	31.2
MANAFWA DISTRICT	**31.9**
Bugobero	30.8
Bukhofu	33.8
Bukusu	33.4
Bunabwana	32.6
Bunyinza Town Council	34.9
Busukuya	33.8
Butiru	30.2
Butta	28.4
Buwagogo	33.8
Buwangani Town Council	31.6
Kaato	32.0
Khabutoola	31.2
Manafwa Town Council	26.0
Nalondo	31.3
Sibanga	32.4
Sisuni	31.5
Weswa	34.2

SUB-COUNTY	MDCP (%)
MBALE DISTRICT	**28.5**
Bubyangu	36.2
Budwale	33.3
Bufumbo	34.0
Bukasakya	27.0
Bukiende	31.1
Bukonde	30.7
Bumasikye	29.5
Bumbobi	28.9
Bungokho	28.4
Bungokho Mutoto	28.4
Busano	34.8
Busiu	31.8
Busiu Town Council	28.8
Busoba	28.8
Industrial Divison	15.4
Lukhonge	31.4
Lwasso	32.9
Nabumali Town Council	27.5
Nakaloke	26.4
Nakaloke Town Council	24.9
Namambasa	30.8
Namanyonyi	26.9
Nawuyo Town Council	19.9
Northern Division	16.1
Nyondo	31.4
Wanale	34.1
Wanale Division	19.4z
NAMISINDWA DISTRICT	**31.3**
Bubutu	30.4
Bukhabusi	33.3
Bukhaweka	31.2
Bukiabi	30.1
Bukokho	33.9
Bumbo	32.0
Bumwoni	27.9
Bupoto	32.4
Buwabwala	31.2
Lwakhakha Town Council	24.1
Magale	31.0
Magale Town Council	25.2
Mukoto	33.6
Namabya	31.1
Namboko	34.7
Namisindwa Town Council	31.0
Tsekululu	33.3

SUB-COUNTY	MDCP (%)
SIRONKO DISTRICT	**30.1**
Budadiri Town Council	22.3
Bugitimwa	32.3
Buhugu	28.9
Bukhulo	29.9
Bukiise	31.1
Bukiyi	29.6
Bukyabo	35.0
Bukyambi	26.6
Bumalimba	29.6
Bumasifwa	32.4
Bunyafa	30.2
Busulani	30.0
Butandiga	32.0
Buteza	33.6
Buwalasi	27.7
Buwasa	29.7
Buyobo	29.2
Masaba	32.9
Nalusala	29.1
Sironko Town Council	27.3
Zesui	32.5

KAMPALA DISTRICT | 8%



PARISH	%MDCP
Central Division	10.0
Kawempe Division	7.1
Makindye Division	10.0
Nakawa Division	5.8
Rubaga Division	5.3

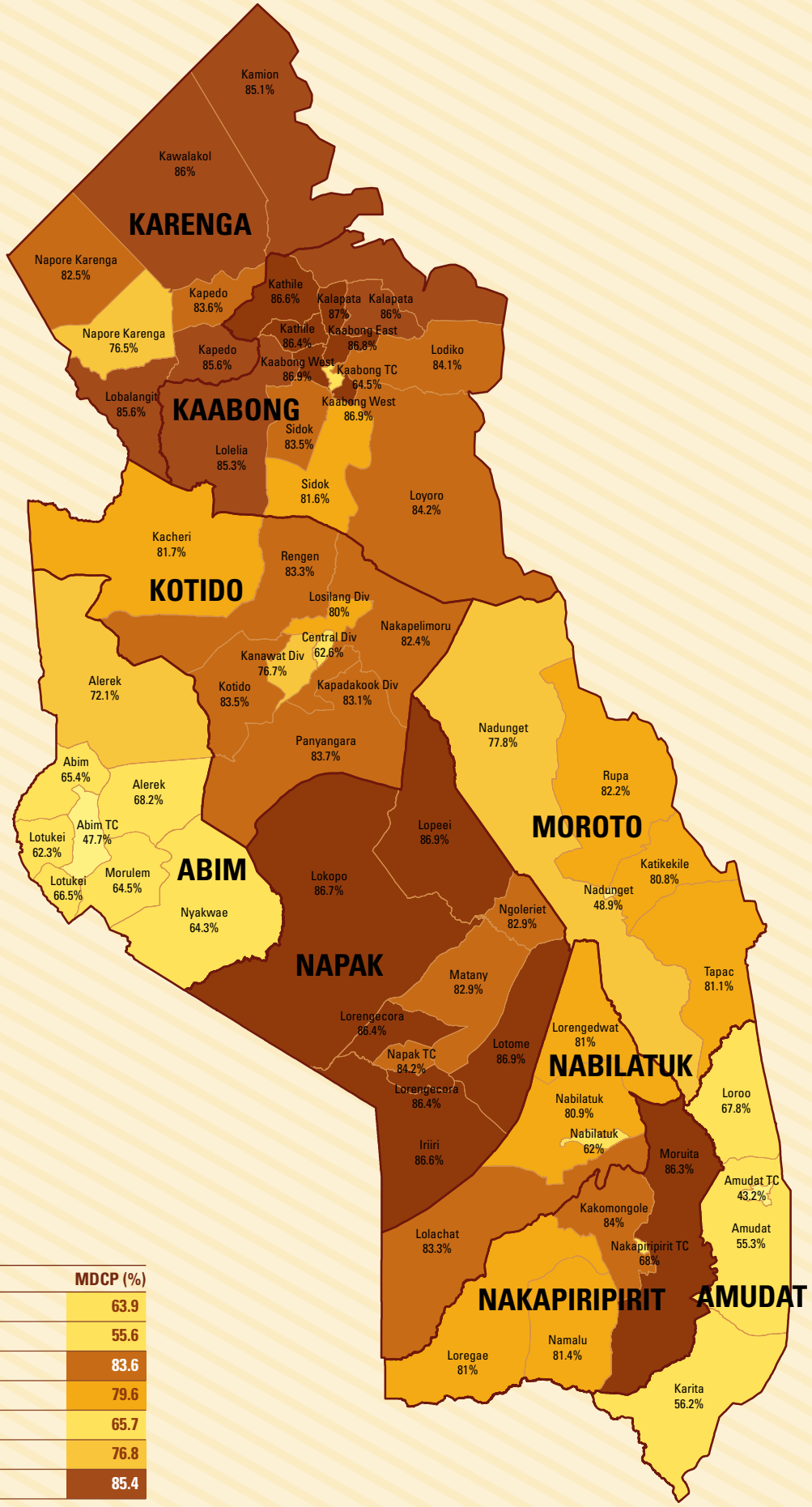
TABLE A5.9: **MD Child Poverty in Districts and Sub-Counties in Kampala Sub-Region in 2019/20**

PARISH	MDCP (%)
CENTRAL DIVISION	**10.0**
Bukesa	5.40%
Civic Center	2.60%
Industrial Area	8.10%
Kagugube	10.90%
Kamwokya I	2.90%
Kamwokya II	6%
Kisenyi III	8.90%
Kisenyi I	2.40%
Kisenyi II	19.20%
Kololo I	1.50%
Kololo II	2.20%
Kololo III	2.80%
Kololo IV	2.70%
Mengo	9.40%
Nakasero I	3.30%
Nakasero II	2.40%
Nakasero III	1.70%
Nakasero IV	0.90%
Nakivubo Shauriyaako	1.80%
Old kampala	2.90%
KAWEMPE DIVISION	**7.1**
Bwaise I	8.30%
Bwaise II	6.80%
Bwaise III	8.50%
Kanyanya	10.10%
Kawempe I	7.10%
Kawempe II	8.60%
Kazo	6.80%
Kikaaya	4.50%
Komamboga	4.40%
Kyebando	6.80%
Makerere I	4.70%
Makerere II	7.20%
Makerere III	7.60%
Makerere University	2.80%
Mpererwe	6.90%
Mulago I	6%
Mulago II	6%
Mulago III	7.40%
Wandegeya	7.30%

PARISH	MDCP (%)
MAKINDYE DIVISION	**10.0**
Bukasa	9.10%
Buziga	20.60%
Ggaba	8.30%
Kabalagala	12.70%
Kansanga	4.10%
Katwe I	5.50%
Katwe II	8.40%
Kibuli	5.50%
Kibuye I	5.90%
Kibuye II	3.60%
Kisugu	6.10%
Lukuli	4.20%
Luwafu	4.80%
Makindye I	4.60%
Makindye II	4.90%
Nsambya Central	7.70%
Nsambya Estate	1.40%
Nsambya Railway	4.80%
Salaama	21%
Wabigalo	5.40%
NAKAWA DIVISION	**5.8**
Banda	6.70%
Bugolobi	2.30%
Bukoto I	5%
Bukoto II	4%
Butabika	5.40%
Itek	0%
Kiswa	6.20%
Kiwatule	6.70%
Kyambogo	2.60%
Kyanja	4.20%
Luzira	5.60%
Luzira Prizons	3.70%
Mbuya I	8.70%
Mbuya II	8%
Mutungo	5.40%
Nabisunsa	1.60%
Naguru I	5.60%
Naguru II	7.50%
Nakawa	5.90%
Nakawa Institution	0.90%
Ntinda	3.30%
UPK	24.40%
Upper Estate	2.40%

PARISH	MDCP (%)
RUBAGA DIVISION	**5.3**
Busega	5.90%
Kabowa	4.80%
Kasubi	5.70%
Lubya	5.60%
Lungujja	5.10%
Mutundwe	4.80%
Najjanankumbi I	4.10%
Najjanankumbi II	4.10%
Nankulabye	4.80%
Namirembe	6.10%
Nateete	4.70%
Ndeeba	7.20%
Rubaga	4.90%

KARAMOJA SUB-REGION | 68%



District Boundary

23.6% - 48.9%

49.0% - 68.2%

68.3% - 77.8%

77.9% - 82.2%

82.3% - 84.2%

84.3% - 86.0%

86.1% - 87.0%

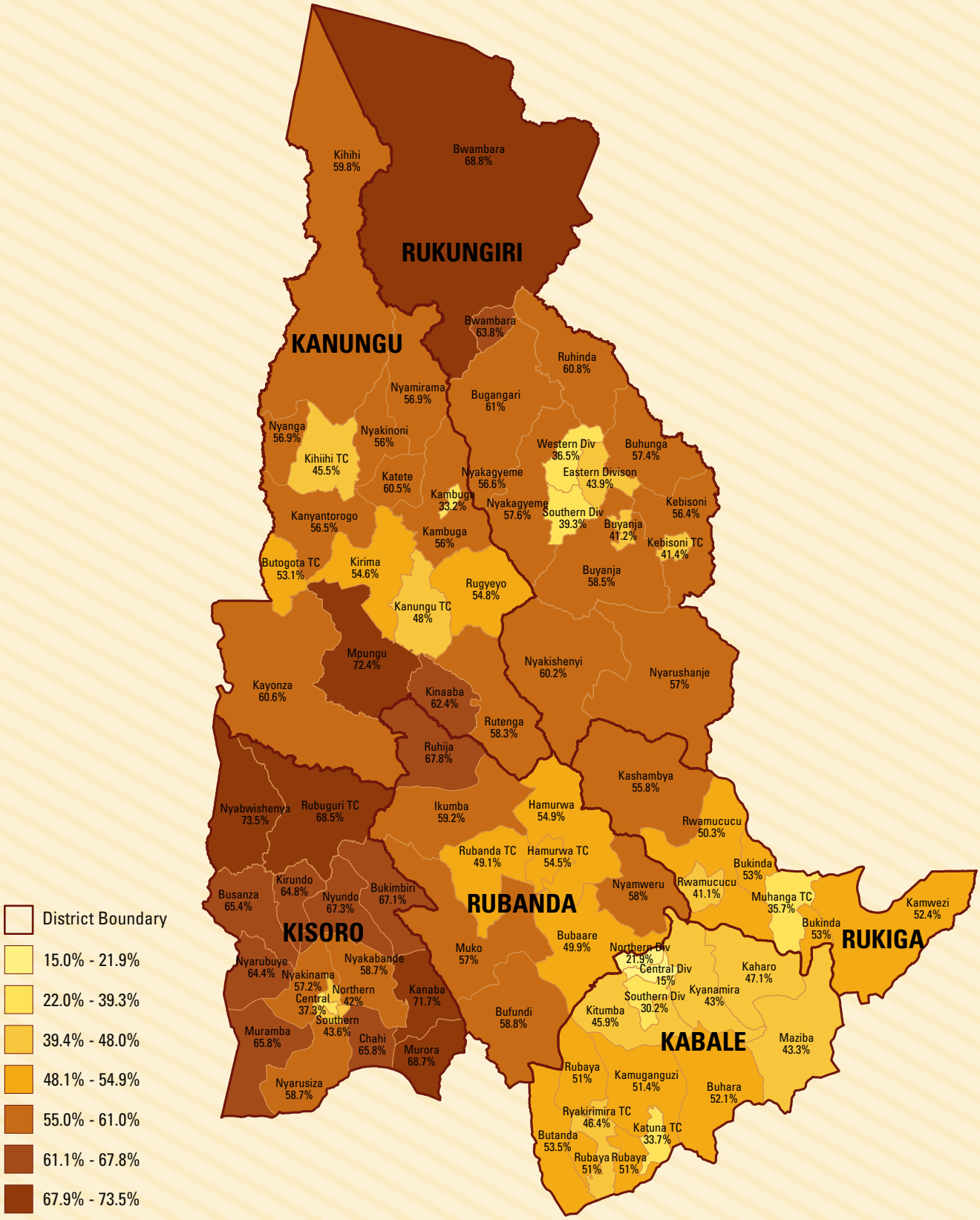
DISTRICT	MDCP (%)
Abim	63.9
Amudat	55.6
Kaabong	83.6
Kotido	79.6
Moroto	65.7
Nabilatuk	76.8
Napak	85.4

TABLE A5.10: **MD Child Poverty in Districts and Sub-Counties in Karamoja Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
ABIM	**63.9**
Abim	65.4
Abim Town Council	47.7
Alerek	72.1
Awach	62.3
Lotukei	66.5
Magamaga	68.2
Morulem	64.5
Nyakwae	64.3
AMUDAT	**55.6**
Amudat	55.3
Amudat Town Council	43.2
Karita	56.2
Loroo	67.8
KAABONG	**83.6**
Kaabong East	86.8
Kaabong Town Council	64.5
Kaabong West	86.9
Kakamar	83.5
Kalapata	86.0
Kamion	85.1
Kapedo	83.6
Karenga	76.5
Kathile	86.6
Kathile South	86.4
Kawalakol	86.0
Lobalangit	85.6
Lodiko	84.1
Lokori	82.5
Lolelia	85.3
Lotim	87.0
Loyoro	84.2
Sangar	85.6
Sidok	81.6

SUB-COUNTY	MDCP (%)
KOTIDO	**79.6**
Central Division	62.6
Kacheri	81.7
Kotido	83.5
Nakapelimoru	82.4
North Division	80.0
Panyangara	83.7
Rengen	83.3
South Division	83.1
West Division	76.7
MOROTO	**65.7**
Katikekile	80.8
Nadunget	77.8
Northern Division	23.6
Rupa	82.2
Southern Divison	48.9
Tapac	81.1
NABILATUK	**76.8**
Lolachat	83.3
Lorengedwat	81.0
Nabilatuk	80.9
Nabilatuk Town Council	62.0
NAKAPIRIPIRIT	80.1
Kakomongole	84.0
Loregae	81.0
Moruita	86.3
Nakapiripirit Town Council	68.0
Namalu	81.4
NAPAK	**85.4**
Iriiri	86.6
Lokopo	86.7
Lopeei	86.9
Lorengecora	86.4
Lotome	86.9
Matany	82.9
Napak Town Council	84.2
Ngoleriet	82.9

KIGEZI SUB-REGION | 68%



DISTRICT	MDCP (%)
Kabale	41.4
Kanungu	55.6
Kisoro	61.2

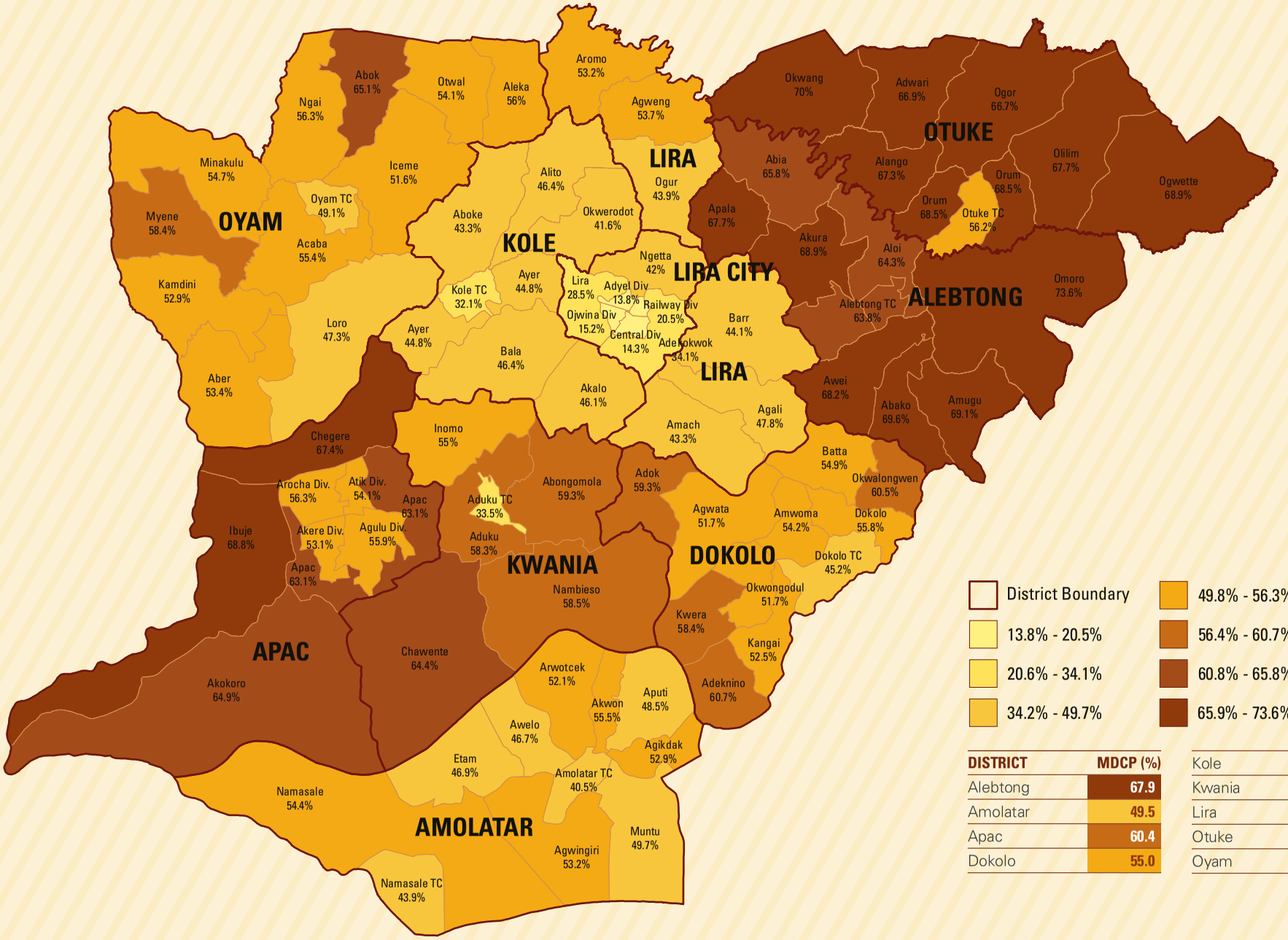
DISTRICT	MDCP (%)
Rubanda	56.6
Rukiga	48.1
Rukungiri	53.8

TABLE A5.11: **MD Child Poverty in Districts and Sub-Counties in Kigezi Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
KABALE	**41.4**
Buhara	52.1
Butanda	53.5
Central Division	15.0
Kaharo	47.1
Kamuganguzi	51.4
Katuna Town Council	33.7
Kitumba	45.9
Kyanamira	43.0
Maziba	43.3
Northern Division	21.9
Rubaya	51.0
Ryakirimira Town Council	46.4
Southern Division	30.2
KANUNGU	**55.6**
Butogota Town Council	53.1
Kambuga	56.0
Kambuga Town Council	33.2
Kanungu Town Council	48.0
Kanyantorogo	56.5
Katete	60.5
Kayonza	60.6
Kihihi	59.8
Kihiihi Town Council	45.5
Kinaaba	62.4
Kirima	54.6
Mpungu	72.4
Nyakinoni	56.0
Nyamirama	56.9
Nyanga	56.9
Rugyeyo	54.8
Rutenga	58.3
KISORO	**61.2**
Bukimbiri	67.1
Busanza	65.4
Central	37.3
Chahi	65.8
Kanaba	71.7
Kirundo	64.8
Muramba	65.8
Murora	68.7
Northern	42.0
Nyabwishenya	73.5
Nyakabande	58.7
Nyakinama	57.2
Nyarubuye	64.4
Nyarusiza	58.7
Nyundo	67.3
Rubuguri Town Council	68.5
Southern	43.6

SUB-COUNTY	MDCP (%)
RUBANDA	**56.6**
Bubaare	49.9
Bufundi	58.8
Hamurwa	54.9
Hamurwa Town Council	54.5
Ikumba	59.2
Muko	57.0
Nyamweru	58.0
Rubanda Town Council	49.1
Ruhija	67.8
RUKIGA	**48.1**
Bukinda	53.0
Kamwezi	52.4
Kashambya	55.8
Mparo Twon Council	41.1
Muhanga Town Council	35.7
Rwamucucu	50.3
RUKUNGIRI	**53.8**
Bugangari	61.0
Buhunga	57.4
Bukurungu Town Council	63.8
Buyanja	58.5
Buyanja Town Council	41.2
Bwambara	68.8
Eastern Divison	43.9
Kebisoni	56.4
Kebisoni Town Council	41.4
Nyakagyeme	57.6
Nyakishenyi	60.2
Nyarushanje	57.0
Ruhinda	60.8
Rwerere Town Council	56.6
Southern Division	39.3
Western Division	36.5

LANGO SUB-REGION | 53%



District Boundary

13.8% - 20.5%

20.6% - 34.1%

34.2% - 49.7%

49.8% - 56.3%

56.4% - 60.7%

60.8% - 65.8%

65.9% - 73.6%

DISTRICT	MDCP (%)
Alebtong	67.9
Amolatar	49.5
Apac	60.4
Dokolo	55.0
Kole	43.0
Kwania	54.8
Lira	34.9
Otuke	66.5
Oyam	54.5

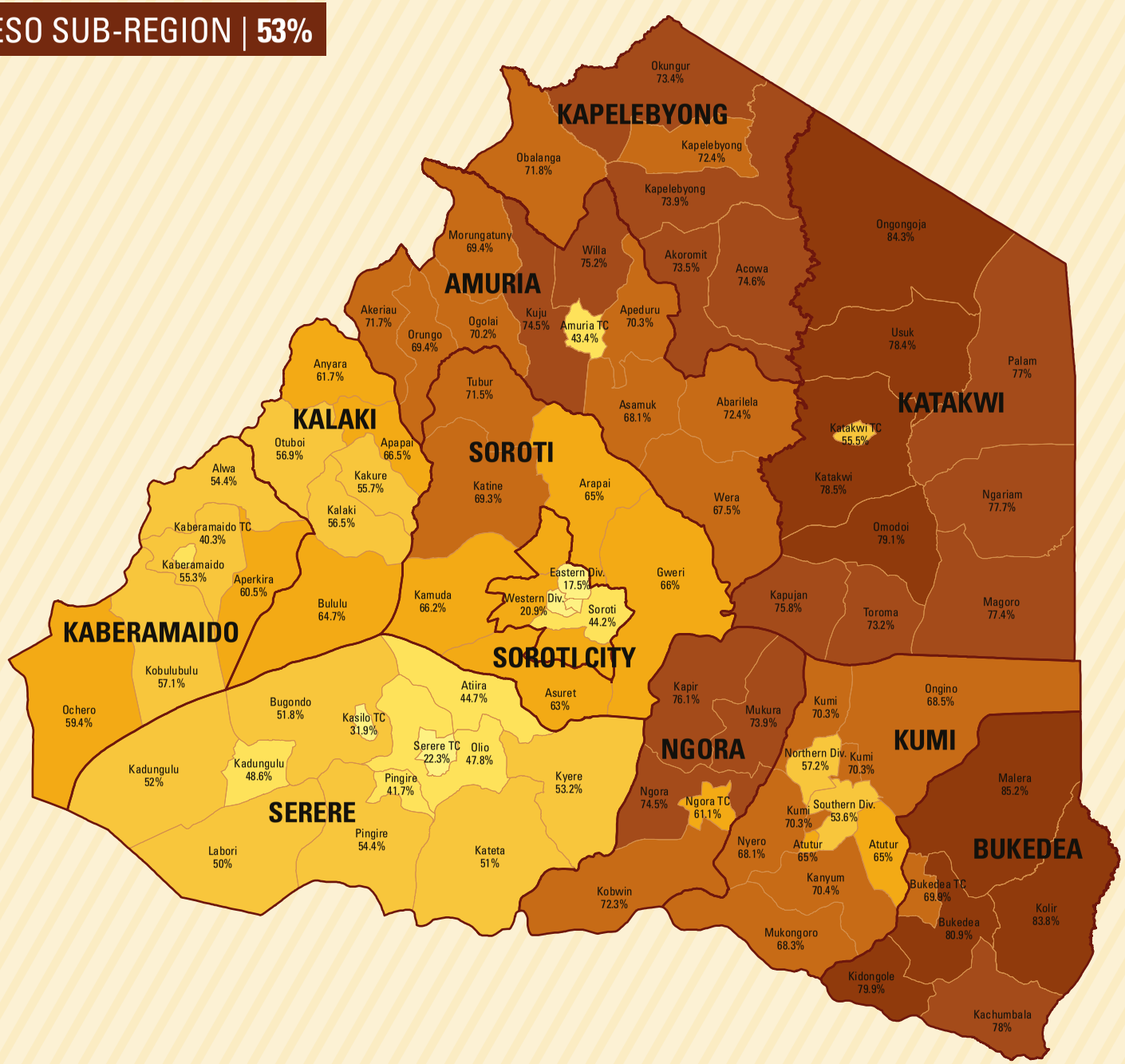
TABLE A5.12: **MD Child Poverty in Districts and Sub-Counties in Lango Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
ALEBTONG DISTRICT	**67.9**
Abako	69.6
Abia	65.8
Akura	68.9
Alebtong Town Council	63.8
Aloi	64.3
Amugu	69.1
Apala	67.7
Awei	68.2
Omoro	73.6
AMOLATAR DISTRICT	**49.5**
Agikdak	52.9
Agwingiri	53.2
Akwon	55.5
Amolatar Town Council	40.5
Aputi	48.5
Arwotcek	52.1
Awelo	46.7
Etam	46.9
Muntu	49.7
Namasale	54.4
Namasale Town Council	43.9
APAC DISTRICT	**60.4**
Agulu Division	55.9
Akere Division	53.1
Akokoro	64.9
Apac	63.1
Arocha Division	56.3
Atik Division	54.1
Chegere	67.4
Ibuje	68.8

SUB-COUNTY	MDCP (%)
DOKOLO DISTRICT	**55.0**
Adeknino	60.7
Adok	59.3
Agwata	51.7
Amwoma	54.2
Batta	54.9
Dokolo	55.8
Dokolo Tc	45.2
Kangai	52.5
Kwera	58.4
Okwalongwen	60.5
Okwongodul	51.7
KOLE DISTRICT	**43.0**
Aboke	43.3
Akalo	46.1
Alito	46.4
Ayer	44.8
Bala	46.4
Kole Town Council	32.1
Okwerodot	41.6
KWANIA DISTRICT	**54.8**
Abongomola	59.3
Aduku	58.3
Aduku Town Council	33.5
Chawente	64.4
Inomo	55.0
Nambieso	58.5

SUB-COUNTY	MDCP (%)
LIRA DISTRICT	**34.9**
Adekokwok	34.1
Adyel Division	13.8
Agali	47.8
Agweng	53.7
Amach	43.3
Aromo	53.2
Barr	44.1
Central Division	14.3
Lira	28.5
Ngetta	42.0
Ogur	43.9
Ojwina Division	15.2
Railway Division	20.5
OTUKE DISTRICT	**66.5**
Adwari	66.9
Alango	67.3
Ogor	66.7
Ogwette	68.9
Okwang	70.0
Olilim	67.7
Orum	68.5
Otuke Town Council	56.2
OYAM DISTRICT	**54.5**
Aber	53.4
Abok	65.1
Acaba	55.4
Aleka	56.0
Iceme	51.6
Kamdini	52.9
Loro	47.3
Minakulu	54.7
Myene	58.4
Ngai	56.3
Otwal	54.1
Oyam Town Council	49.1

TESO SUB-REGION | 53%



- District Boundary
- 17.5% - 31.9%
- 32.0% - 48.6%
- 48.7% - 57.2%
- 57.3% - 66.5%
- 66.6% - 72.4%
- 72.5% - 78.0%
- 78.1% - 85.2%

DISTRICT	MDCP (%)
Amuria	68.4
Bukedea	79.6
Kaberamaido	57.4
Kapelebyong	73.3
Katakwi	75.7
Kumi	65.2
Ngora	71.6
Serere	45.8
Soroti	51.0

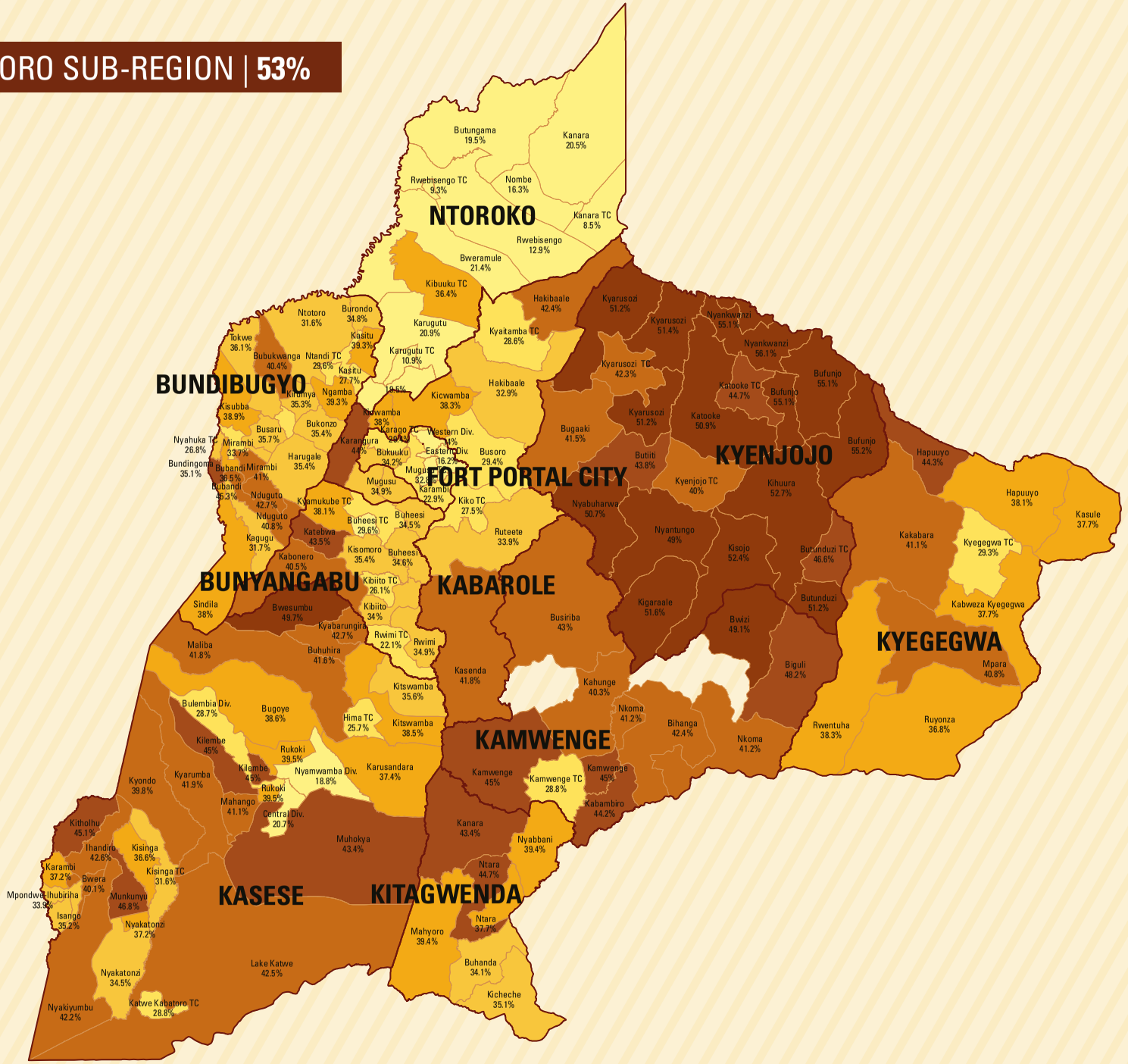
TABLE A5.13: **MD Child Poverty in Districts and Sub-Counties in Teso Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
AMURIA DISTRICT	**68.4**
Abarilela	72.4
Akeriau	71.7
Amuria Town Council	43.4
Apeduru	70.3
Asamuk	68.1
Kuju	74.5
Morungatuny	69.4
Ogolai	70.2
Orungo	69.4
Wera	67.5
Willa	75.2
BUKEDEA DISTRICT	**79.6**
Bukedea	80.9
Bukedea Town Council	69.9
Kachumbala	78.0
Kidongole	79.9
Kolir	83.8
Malera	85.2
KABERAMAIDO DISTRICT	**57.4**
Alwa	54.4
Anyara	61.7
Apapai	66.5
Aperkira	60.5
Bululu	64.7
Kaberamaido	55.3
Kaberamaido Town Council	40.3
Kakure	55.7
Kalaki	56.5
Kobulubulu	57.1
Ochero	59.4
Otuboi	56.9

SUB-COUNTY	MDCP (%)
KAPELEBYONG DISTRICT	**73.3**
Acowa	74.6
Akoromit	73.5
Kapelebyong	73.9
Kapelebyong Town Council	72.4
Obalanga	71.8
Okungur	73.4
KATAKWI DISTRICT	**75.7**
Kapujan	75.8
Katakwi	
Katakwi Town Council	55.5
Magoro	77.4
Ngariam	77.7
Omodoi	79.1
Ongongoja	84.3
Palam	77.0
Toroma	73.2
Usuk	78.4
KUMI DISTRICT	**65.2**
Atutur	65.0
Kanyum	70.4
Kumi	70.3
Mukongoro	68.3
Northern Divison	57.2
Nyero	68.1
Ongino	68.5
Southern Division	53.6
NGORA DISTRICT	**71.6**
Kapir	76.1
Kobwin	72.3
Mukura	73.9
Ngora	74.5
Ngora Town Council	61.1

SUB-COUNTY	MDCP (%)
SERERE DISTRICT	**45.8**
Atiira	44.7
Bugondo	51.8
Kadungulu	52.0
Kadungulu Town Council	48.6
Kasilo Town Council	31.9
Kateta	51.0
Kidetok Town Council	41.7
Kyere	53.2
Labori	50.0
Olio	47.8
Pingire	54.4
Serere Town Council	22.3
SOROTI DISTRICT	**51.0**
Arapai	65.0
Asuret	63.0
Eastern Division	17.5
Gweri	66.0
Kamuda	66.2
Katine	69.3
Northern Division	26.3
Soroti	44.2
Tubur	71.5
Western Division	20.9

TOORO SUB-REGION | 53%



District Boundary

8.5% - 21.4%

21.5% - 29.6%

29.7% - 36.1%

36.2% - 39.5%

39.6% - 43.0%

43.1% - 48.2%

48.3% - 56.1%

SUB-COUNTY	MDCP (%)
Bundibugyo District	35.6
Bunyangabu District	32.5
Kabarole District	30.8
Kamwenge District	41.0
Kasese District	37.6
Kisinga	36.6
Kyenjojo District	49.8

TABLE A5.14: **MD Child Poverty in Districts and Sub-Counties in Tooro Sub-Region in 2019/20**

SUB-COUNTY	MDCP (%)
BUNDIBUGYO DISTRICT	**35.6**
Bubandi	36.5
Bubukwanga	40.4
Buganikire Town Councili	33.7
Bukonzo	35.4
Bundibugyo Town Council	22.5
Bundingoma	35.1
Burondo	34.8
Busaru	35.7
Busunga Twon Council	45.3
Butama-Mitunda Town Council	40.8
Harugale	35.4
Kagugu	31.7
Kasitu	39.3
Kirumya	35.3
Kisubba	38.9
Mabere	27.7
Mirambi	41.0
Nduguto	42.7
Ngamba	39.3
Ntandi Town Council	29.6
Ntotoro	31.6
Nyahuka Town Council	26.8
Sindila	38.0
Tokwe	36.1

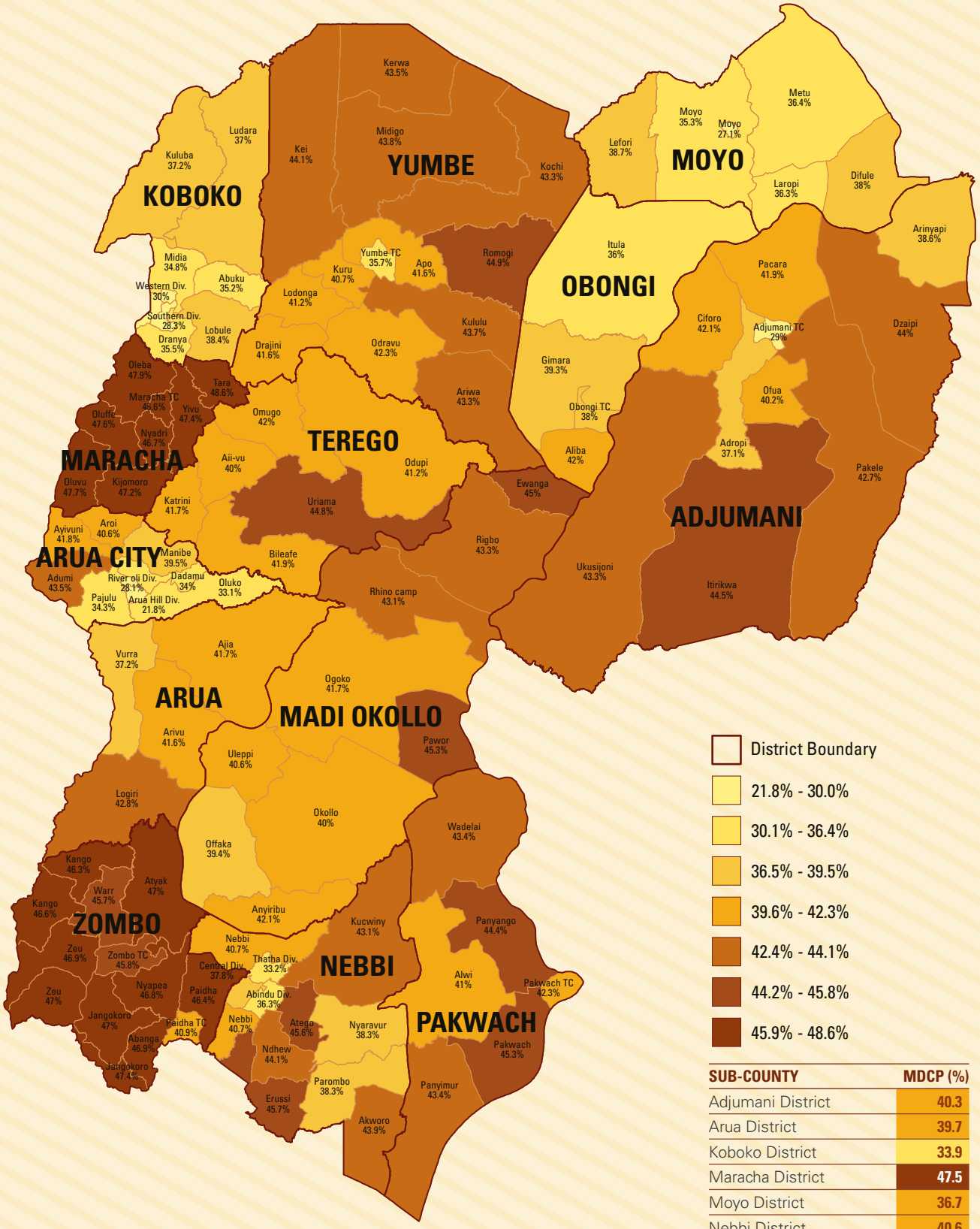
SUB-COUNTY	MDCP (%)
BUNYANGABU DISTRICT	**32.5**
Buheesi	34.5
Buheesi Town Council	29.6
Kabonero	40.5
Katebwa	43.5
Kibiito	34.0
Kibiito Town Council	26.1
Kisomoro	35.4
Kiyombya	34.6
Kyamukube Town Council	38.1
Rubona Town Council	16.8
Rwimi	34.9
Rwimi Town Council	22.1
KABAROLE DISTRICT	**30.8**
Bukuuku	34.2
Busoro	29.4
Eastern Division	16.2
Hakibaale	32.9
Harugogo	38.3
Kabende	42.4
Karago Town Council	29.4
Karambi	22.9
Karangura	44.0
Kasenda	41.8
Kicwamba	38.0
Kijura Town Council	28.6
Kiko Town Council	27.5
Mugusu	34.9
Mugusu Town Council	32.8
Ruteete	33.9
Southern Division	13.6
Western Division	14.0

SUB-COUNTY	MDCP (%)
KAMWENGE DISTRICT	**41.0**
Biguli	48.2
Bihanga	42.4
Buhanda	34.1
Busiriba	43.0
Bwizi	49.1
Kabambiro	44.2
Kahunge	40.3
Kahunge Town Council	
Kamwenge	45.0
Kamwenge Town Council	28.8
Kanara	43.4
Kicheche	35.1
Mahyoro	39.4
Nkoma	41.2
Nkoma Town Council	
Ntara	44.7
Ntara Kichwamba Town Council	37.7
Nyabbani	39.4
KASESE DISTRICT	**37.6**
Bugoye	38.6
Buhuhira	41.6
Bulembia Division	28.7
Bwera	40.1
Bwesumbu	49.7
Central Division	20.7
Hima Town Council	25.7
Ihandiro	42.6
Isango	35.2
Karambi	37.2
Karusandara	37.4
Katwe Kabatoro Town Council	28.8
Kilembe	45.0
Kinyamasrke Town Council	37.2

SUB-COUNTY	MDCP (%)
KISINGA	**36.6**
Kisinga Town Council	31.6
Kitholhu	45.1
Kitswamba	38.5
Kyabarungira	42.7
Kyarumba	41.9
Kyondo	39.8
Lake Katwe	42.5
Mahango	41.1
Maliba	41.8
Mpondwe-Lhubiriha	33.9
Muhokya	43.4
Munkunyu	46.8
Nyakatonzi	34.5
Nyakiyumbu	42.2
Nyamwamba Division	18.8
Rugendabara	35.6
Rukoki	39.5
KYEGEGWA DISTRICT	**38.2**
Hapuuyo	38.1
Kabweza Kyegegwa	37.7
Kakabara	41.1
Kasule	37.7
Kigambo	44.3
Kyegegwa Town Council	29.3
Mpara	40.8
Ruyonza	36.8
Rwentuha	38.3

SUB-COUNTY	MDCP (%)
KYENJOJO DISTRICT	**49.8**
Bufunjo	55.1
Bugaaki	41.5
Butiiti	43.8
Butunduzi	51.2
Butunduzi Town Council	46.6
Kanyegaramire	55.2
Katooke	50.9
Katooke Town Council	44.7
Kigaraale	51.6
Kihuura	52.7
Kisojo	52.4
Kyamutunzi Town Council	55.1
Kyarusozi	51.2
Kyarusozi Town Council	42.3
Kyembogo	51.4
Kyenjojo Town Council	40.0
Nyabiringo	55.1
Nyabuharwa	50.7
Nyankwanzi	56.1
Nyantungo	49.0
NTOROKO DISTRICT	**17.7**
Butungama	19.5
Bweramule	21.4
Kanara	20.5
Kanara Town Council	8.5
Karugutu	20.9
Karugutu Town Council	10.9
Kibuuku Town Council	36.4
Nombe	16.3
Rwebisengo	12.9
Rwebisengo Town Council	9.3

WEST NILE SUB-REGION | 41%



SUB-COUNTY	MDCP (%)
Adjumani District	40.3
Arua District	39.7
Koboko District	33.9
Maracha District	47.5
Moyo District	36.7
Nebbi District	40.6
Pakwach District	43.3
Yumbe District	42.3
Zombo District	46.2

TABLE A5.15: **MD Child Poverty in Districts and Sub-Counties in West Nile Sub-Region in 2019/2**

SUB-COUNTY	MDCP (%)
ADJUMANI DISTRICT	**40.3**
Adjumani Town Council	29.0
Adropi	37.1
Arinyapi	38.6
Ciforo	42.1
Dzaipi	44.0
Itirikwa	44.5
Ofua	40.2
Pacara	41.9
Pakele	42.7
Ukusijoni	43.3
ARUA DISTRICT	**39.7**
Adumi	43.5
Aii-Vu	40.0
Ajia	41.7
Anyiribu	42.1
Arivu	41.6
Aroi	40.6
Arua Hill Division	21.8
Ayivuni	41.8
Bileafe	41.9
Dadamu	34.0
Ewanga	45.0
Katrini	41.7
Logiri	42.8
Manibe	39.5
Odupi	41.2
Offaka	39.4
Ogoko	41.7
Okollo	40.0
Oluko	33.1
Omugo	42.0
Pajulu	34.3
Pawor	45.3
Rhino Camp	43.1
Rigbo	43.3
River Oli Division	28.1
Uleppi	40.6
Uriama	44.8
Vurra	37.2
KOBOKO DISTRICT	**33.9**
Abuku	35.2
Dranya	35.5
Kuluba	37.2
Lobule	38.4
Ludara	37.0
Midia	34.8
Northern Divison	28.9
Southern Division	28.3
Western Division	30.0

SUB-COUNTY	MDCP (%)
MARACHA DISTRICT	**47.5**
Kijomoro	47.2
Maracha Town Council	46.6
Nyadri	46.7
Oleba	47.9
Oluffe	47.6
Oluvu	47.7
Tara	48.6
Yivu	47.4
MOYO DISTRICT	**36.7**
Aliba	42.0
Difule	38.0
Gimara	39.3
Itula	36.0
Laropi	36.3
Lefori	38.7
Metu	36.4
Moyo	35.3
Moyo Town Council	27.1
Obongi Town Council	38.0
NEBBI DISTRICT	**40.6**
Abindu Division	36.3
Akworo	43.9
Atego	45.6
Central Division	37.8
Erussi	45.7
Kucwiny	43.1
Ndhew	44.1
Nebbi	40.7
Nyaravur	38.3
Parombo	38.3
Thatha Division	33.2
PAKWACH DISTRICT	**43.3**
Alwi	41.0
Pakwach	45.3
Pakwach Town Council	42.3
Panyango	44.4
Panyimur	43.4
Wadelai	43.4
YUMBE DISTRICT	**42.3**
Apo	41.6
Ariwa	43.3
Drajini	41.6
Kei	44.1
Kerwa	43.5
Kochi	43.3
Kululu	43.7
Kuru	40.7
Lodonga	41.2
Midigo	43.8
Odravu	42.3
Romogi	44.9
Yumbe Town Council	35.7

SUB-COUNTY	MDCP (%)
ZOMBO DISTRICT	**46.2**
Abanga	46.9
Akaa	47.0
Alangi	46.6
Athuma	47.0
Atyak	47.0
Jangokoro	47.4
Kango	46.3
Nyapea	46.8
Paidha	46.4
Paidha Town Council	40.9
Warr	45.7
Zeu	46.9
Zombo Town Council	45.8

UGANDA BUREAU OF STATISTICS

We are Evidence Based

THE REPUBLIC OF UGANDA

MULTIDIMENSIONAL CHILD POVERTY IN UGANDA
VOLUME 1: THE EXTENT AND NATURE OF MULTIDIMENSIONAL CHILD POVERTY AND DEPRIVATION | 2024

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