



THE STATE OF UGANDA POPULATION REPORT 2022

ACCELERATE DEMOGRAPHIC TRANSITION:
REFOCUS INVESTMENTS TO ATTAIN A
FAVORABLE POPULATION
AGE STRUCTURE FOR
SUSTAINABLE
DEVELOPMENT

NOVEMBER 2022



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FOREWORD



With pleasure, the Ministry of Finance Planning and Economic Development presents the 22nd edition of the State of Uganda Population Report (SUPRE). The theme for this edition is **"Accelerate Demographic Transition: Refocus Investments to attain a favourable Population age structure for sustainable Development"**. The theme was arrived at based on the National Population Policy 2020. As you may recall, in 2020, Cabinet approved a new Population Policy for the country. With the new Policy, Uganda shifted from implementing a Population-Influencing type of Policy to a Population-Responsive kind of Policy. The main thrust of the policy is to accelerate fertility and mortality decline, attain a population age structure favourable for development through lowering the dependency burden and increase investments in young people.

This year's theme emerged following a series of internal and external consultative meetings. The theme is based on the overarching need to cultivate, nurture and harness the Demographic Dividend. The game changers for Demographic Transition are; promoting family planning, improving child survival, keeping children, especially girls, in school to completion and strengthening organised urbanisation.

The report highlights the need to accelerate the Demographic Transition. It summarises the status, determinants, consequences and prospects of realising the Demographic Dividend for Uganda and recommends

policy interventions Uganda needs to address challenges posed by population dynamics and the development nexus.

The Human Capital Development Program of the NDP III articulates that well-educated, skilled and healthy human resources are essential to facilitate development. In particular, adequate investment in Science, Technology and Innovation (STEI) is critical for a country to industrialise and achieve sustainable development. The availability of appropriate and suitable human capital facilitates production, productivity and technological growth. Investing in population health, nutrition, early childhood development, sanitation and hygiene, primary education and tackling vulnerabilities helps set the foundation for the required human capital. Ultimately, human capital development contributes to the NDP III goal of increased household incomes and quality of life through increased productivity, inclusiveness and well-being of the population. The Uganda Vision 2040 identifies human capital development as one of the fundamentals to accelerate the country's transformation and harness the Demographic Dividend.

Demographic transition is a long-term trend of declining birth and death rates, resulting in substantive change in the age distribution of a population. With a period of rapid population growth first triggered by declining mortality rates, followed by declining fertility rates. When the country experiences rapid economic

expansion and considerable gains in terms of human capital indicators, the Demographic Transition can lead to a Demographic Dividend. Higher survival rates in a given cohort, followed by fewer children in the next, produce a population bulge that translates into a higher labour supply and a lower dependency ratio. The effect is magnified when lower fertility allows women to enter the labour force at a higher proportion. As these groups move into productive jobs, household and national income gains are materialised, thus creating a Demographic Dividend for the country.

As Uganda is in the early transition phase of its demographic change, now is the ideal time to plan and ramp up the expansion of essential public services in line with these population projections. Doing so will put Uganda on the path to realising the Demographic Dividend and enjoying higher economic growth for years to come.

The Government of Uganda is implementing several programs to nurture the potential of its young population. These includes Universal Primary and Secondary education, establishing vocational and technical institutions per district and scaling down to the constituency level. Other programs include the Youth Livelihood Program, the Science, Technology and Innovation and Information and Communication Technology Programs. Various funds have been established, such as the Agricultural Credit Facility, the Small Business Recovery and the Science Technology and Innovation Funds. The Government will continue to strengthen its efforts in supporting reproductive health, favourable women's empowerment and family planning to allow mothers, children and the population to achieve better levels of health. The Government's investments in health, education and economic interventions to facilitate human capital development and a productive labour market will firmly place Uganda on the path towards achieving a Demographic Dividend and set the stage for sustainable socio-economic development.

The report comes when the world population has reached the eight billion milestone. In Uganda, our population has clocked 45 million. This milestone provides us with an opportunity to pose, reflect and celebrate because, due to the Government's investments in the population, Ugandans are now healthier and living longer. Life expectancy has increased by 20 years in one generation, from 43 years in 1991 to 63.3 years.

As a result of increased immunisation against killer diseases, fewer children are now dying from preventable diseases. The infant mortality rate has reduced from 122 deaths per 1,000 live births in 1991 to 43 deaths per 1,000 live births. The number of women dying in childbirth and pregnancy-related concerns reduced from 506 deaths per 100,000 live births in 1991 to 336 deaths per 100,000 live births. However, Government acknowledges that this indicator is still way above the acceptable range. Our population living in poverty fell dramatically from 56 per cent in 1992 to 20.3 per cent in 2020. Uganda's GDP per capita increased to US Dollars 1,046, equivalent to Uganda Shs. 3.7 million per person per year. We have therefore, passed the threshold for becoming a lower middle-income country. The entry point to the lower middle-income status is USD 1,036. This is a significant achievement.

Finally, the Ministry of Finance Planning and Economic Development would like to congratulate the National Population Council on the successful production of the State of Uganda Population Report 2022. I, at this moment, invite all the policy, decision-makers and citizens to read and use this informative report to support evidence-based decision-making on matters of national importance, especially in accelerating the Demographic Transition.



Hon. Amos Lugoloobi (MP)

Minister of State for Finance, Planning and Economic Development (Planning).



MESSAGE FROM UNFPA REPRESENTATIVE



Realizing Uganda's Demographic Dividend in A World of Infinite Possibilities

The World population has reached 8 Billion this year, November 2022. We recognize this milestone as it presents a vital opportunity to draw the world's attention to the infinite possibilities of humanity to build the world we want, with sexual and reproductive health and rights for all at its core. We celebrate the advancements that have enabled more women to have children by choice, not by chance, and more women delivering safely under skilled care.

UNFPA takes this opportunity to underscore the need to move the conversation from numbers to rights and choices, and to find solutions that benefit all people in a society; whether in a rapidly ageing population or in a high-fertility population, and result in a more just, prosperous and sustainable world.

The increase in the size of our human family should not obscure the fact that we are in the midst of an unprecedented demographic shifts and fertility decline. These demographic trends entailing decreasing mortality rates and increasing size of the working age population is resulting in a unique demographic window that is highly beneficial to Africa and Uganda, where a big proportion of the population is young with a median age of 17 in the continent. However, realizing this demographic dividend is not automatic and requires

deliberate and smart investments in the social sectors. In that respect, Uganda has led the way in ensuring the country is better positioned to reap this demographic dividend.

The hard-won progress in health and development, which we have observed globally and in Uganda should be recognized and celebrated. Improvements in maternal and child health mean that a baby born today in Uganda, is expected to live on average to at least 63 years.

UNFPA is committed to ensuring that: Every pregnancy is wanted; Every child birth is safe; and Every young person's potential is fulfilled. This will be achieved through impactful interventions that will undoubtedly have economic returns. Studies supported by UNFPA have shown that:

- Every dollar invested in ending preventable maternal deaths and the unmet need for family planning by 2030 will bring economic benefits of \$8.4 by 2050.
- Every dollar invested in ending female genital mutilation by 2030 will bring economic benefits of \$10.1 by 2050.
- Every dollar invested in ending child marriage by 2030 will bring economic benefits of \$33.6 by 2050.
- Evidence also shows that on an annual basis Uganda would save more than USD184 million spent on health care for teenage mothers and education of their children. (UNFPA, 2021).

It is evident, that as eight billion, we have the power to shape our common futures. And by protecting individual rights, we can unlock the unlimited potential of people around the world to address the challenges facing their societies and the global problems imperiling us all. As we know, the goal is not more or fewer people, but more and equal access to opportunities for people, especially women and girls, and where we can all harness the infinite possibilities that may lead us all to achieving the Sustainable Development Goals.

Although, there is much to celebrate, UNFPA calls on all around the world – all eight billion of us – to find solutions to the challenges the global community is facing. Young people and women are still denied the fundamental right to make decisions over their bodies and futures; many adolescents, youth and women do not have access to healthcare and social protection, and are unable to complete quality primary and secondary education. Furthermore, high rates of teenage pregnancy, child marriage and female genital mutilation, all grave human

rights violations are depriving girls of their education, health, security and futures.

UNFPA calls for investment in sexual and reproductive health and rights as one of the most powerful accelerators of human progress, delivering strong returns to economies and societies through lasting benefits for individuals and families. Only then can we see Uganda realizing the undeniable benefits of its demographic window.



Dr. Mary Otieno

Country Representative, UNFPA Uganda



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The Council is particularly grateful to the Government of Uganda and the United Nations Population Fund (UNFPA) for the financial support that enabled the development and production of the 2022 State of Uganda Population Report with the theme **"Accelerate Demographic Transition: Refocus Investments to attain a favourable population age structure for sustainable development"**. The 22nd edition of the State of Uganda Population Report was prepared by a team of dedicated Authors and Editorial Committee members. The National Population Council acknowledges and appreciates the role played by the authors in the development of the articles of this report. The authors were: Mr Paul Corti Lakuma, Mr Adrian Ssessanga, Ms Clare Kyomuhendo, Mr David Adumbire Atombire, Dr Deborah Atwiine, Dr Betty Kyaddondo, Ms Innocent Owomugisha, Ms Lydia Nabiryo, and Dr Nakijoba Rosemary.

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Dr. Jotham Musinguzi

Director General, National Population Council

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LIST OF ACRONYMS

ACF	Agricultural Credit Facility
AIDS	Acquired Immunodeficiency Syndrome
ASFRs	Age-Specific Fertility Rates
ASRH	Adolescent Sexual Reproductive Health
BMAU	Budgeting Monitoring and Accounting Unit
CDOs	Collateralized Debt Obligations
CI	Coincident Index
CMMCP	Community Mobilisation and Mindset Change Programme
CPR	Conditional Repayment Rate
CRC	Convention of the Rights of Children
CSOs	Civil Society Organizations
DD	Demographic Dividend
DET	Disability Equality Training
DG	Director General
DHS	Demographic and Health Survey
DT	Demographic Transition
DUCAR	District, Urban and Community Roads
EBDM	Evidence-Based Decision-Making
ECS	Entandikwa Credit Scheme
FP	Family Planning
FP-CIP I	National Family Planning Costed Implementation
GDP	Gross Domestic Product
GFF	Global Financing Facility
GoU	Government of Uganda
HCD	Human Capital Development
HCDP	Human Capital Development Program
HIPs	High Impact Practices
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HUMCs	Health Unit Management Committees
ICF	International Classification of Functioning, Disability and Health
ICPD	International Conference on Population and Development
ICT	Information and Communication Technology
IDIWA	Integrated Disabled Women Activities
IDP	Internally Displaced Persons
IECs	Information, Education and Communication
IMR	Infant Mortality
IMR	Infant Mortality Rate
IPs	Implementing Partners

IRB	Institutional Review Board
IRR	Internal Rate of Returns
IUD	Intra-Uterine Device
KCCA	Kampala Capital City Authority
LC	Local Council
LED	Local Economic Development
LGs	Local Governments
LMIS	Logistics Management Information System
M&E	Monitoring and Evaluation
MCPR	Modern Contraceptive Prevalence Rate
MCPR	Modern Contraceptive Prevalence Rate
MCs	Municipal Councils
MCU	Modern Contraceptive Use
MDAs	Departments and Agencies
MDAs	Ministries Departments and Agencies
MED	Monitoring and Evaluation Department
MGLSD	Ministry of Gender, Labour and Social Development
MMR	Maternal Mortality Rate
MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance, Planning and Economic Development
MoH	Ministry of Health
MP	Member of Parliament
MUK	Makerere University
NDP III	National Development Plan III
NHIS	National Health Insurance Scheme
NMS	National Medical Stores
NPA	National Planning Authority
NPC	National Population Council
NPP	National Population Policy
NRM	National Resistance Movement
NSGE	National Strategy for Girls Education
NY	National Income
OR	Odd Ratios
PAFP	Post Abortion Family Planning
PDM	Parish Development Model
PIAPs	Programme Implementation Action Plans
PMC	Population Media Centre
PNFP	Private Not For Profit
PPFP	Post Partum Family Planning
PRP	Population Responsive Policy
PWDs	People With Disabilities
QPPU	Quantification and Procurement Planning Unit
RBF	Result-Based Financing

RH	Reproductive Health
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
SACCOS	Savings and Credit Cooperative Organisation or Society.
SAGE	Social Assistance Grant for Empowerment
SBRFs	Small Business Recovery Funds
SDGs	Sustainable Development Goals
SPSS	Statistical Packages for Social Sciences
SRHR	Sexual and Reproductive Health and Rights
STATA	Statistical Analysis Software
STEI	Science, Technology and Innovation
SUPRE	State of Uganda's Population Report
TCEB	Total Children Ever Born
TFR	Total Fertility Rate
TVET	Technical and Vocational Educational Training
TWG	Technical Working Groups
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic and Health Survey
UFPC	Uganda Family Planning Consortium
UFPCIP	Uganda Family Planning Costed Implementation Plan
UGX	Uganda Shilling
UHC	Universal Health Coverage
UNDESA	United Nations Department of Economic and Social Affairs
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHS	Universal Newborn Hearing Screening
UNICEF	United Nations High Commissioner for Refugees
UPE	Universal Primary Education
UPHIA	Uganda Population based HIV Impact Assessment
URMCHIP	Uganda Reproductive, Maternal and Child Health Services Improvement Project
USAID	United States Agency for International Development
USD	United States Dollars
USDHHS	United States Department of Health and Human Services
USE	Universal Secondary Education
UWEP	Uganda Women Entrepreneurship Programme
VHT	Village Health Teams
VTI	Vocational and Technical Institutions
WHO	World Health Organization
YIGs	Youth Interest Groups
YLP	Youth Livelihood Program

OVERVIEW OF THE SUPRE 2022

Overview

The National Population Council is pleased to present the 22nd edition of the annual State of Uganda Population Report (SUPRE). Uganda Vision 2040 pronounced harnessing the demographic dividend as one of the key strategies for achieving the Vision targets. The harnessing of the dividend calls for a concerted investment in the country's human resources, particularly the young people, which should culminate into a rapid demographic transition, that is, a drastic drop in mortality and fertility. The available data show that the demographic transition has already begun in Uganda. However, the pace of the transition is not yet at a level that can trigger the socio-economic transformation of the type experienced by the "Asian Tigers" of South-East Asia.

Uganda is currently implementing the 2020 National Population Policy, which shifts from the hitherto Population-Responsive type of Policy to a Population-Influencing kind of Policy. The aim is to accelerate fertility and mortality decline, attain a population age structure favourable for development through lowering dependency burden and increase investments in young people. In light of this, the theme for SUPRE 2022 seeks to focus on attaining a favourable age structure.

Consequently, this year's SUPRE theme is: "Accelerate Demographic Transition: Refocus investments to attain a favourable population age structure for sustainable development". The sustainable age structure has most people in the working age bracket, 15 – 64, rather than the dependent bracket of 0 – 14. Such an age structure is realized when there is a significant reduction in the population's fertility, and smaller child cohorts are added to the population every year. The change in age structure has to be accompanied by investments in the young people's health, education, and skilling to turn them into a competitive human capital as well as introducing conducive economic policies and strengthening governance structures to cultivate and nurture the budding social and economic transformation properly.

The current issue, therefore, explores critical bottlenecks in Uganda's population dynamics to find ways in which the demographic transition can be expedited toward the desired results. This re-examination is meant to produce the evidence which will guide the strategic re-positioning and re-allocation of the country's scarce resources toward the Vision goal of harnessing the demographic dividend.

One of the key components of the expected socio-economic transformation is the rapid decline in fertility which would, in turn, produce a more investment and development-oriented age structure. One of the key bottlenecks in this regard is teenage pregnancy which not only props up dysfunctional high fertility due to their unplanned nature but also wastes a lot of the country's human and material resources regarding health risks and school dropout.

Studies also show that even older women are not sufficiently empowered to manage their childbearing due to intermittent flows in family planning commodities, which have put them at heightened risks of unplanned pregnancies. There is evidence that women and couples would like to have only the number of children they desire at the time of their choice with their desired spacing. The issue, therefore, underscores the need for supporting this principle and the strategies that can be engaged to ensure its realization. Eliminating unplanned pregnancies would reduce Uganda's fertility by up to 40 percent while enhancing maternal and child health greatly.

The Sustainable Development Goals (SDG) emphasize the issue of leaving no one behind. All women must therefore be assured of equitable access to sexual and reproductive information and services. Studies have found that although age-appropriate sexual and reproductive information provision is increasingly being espoused, a large constituency of women is excluded, including women with disabilities of various types. The current issue advocates re-examining this situation to attain universal access to sexual and reproductive health rights and services.

The third National Development Plan (NDP III) pronounced planned urbanization as one of the strategies for achieving the social and economic transformation Uganda is aspiring to. Urbanization, if properly planned, can act as a colossal force in development pursuits. However, in policy and programme terms, this phenomenon can act as a catalyst or a hindrance to demographic and social aspirations. This is due to the duality of population dynamics. Population dynamics, i.e. fertility, mortality and migration, can affect urbanization, while urbanization can also affect population dynamics. This duality must therefore be carefully managed to produce the desired development results.

Lastly, all this interplay of population and socio-economic factors must be viewed within the Government's overarching theme of sustainable wealth creation. NDP III identified mindset as one of the key stumbling blocks to attaining development aspirations. Consequently, a whole programme was developed to deal with a mindset change and community mobilization. This issue, therefore, examines how mindset can be incorporated into leadership and governance issues in the wealth creation agenda within the Parish Development Model (PDM), which is the "last mile" development platform for all Government programmes.

1.0. Introduction

Globally, it is estimated that of all females between 2010 and 2030, about 615 million of them will be teenagers aged 10 and 19 (15%) (UNFPA, 2013). This figure would be higher in sub-Saharan Africa, where teenage pregnancy is most prevalent and contraceptive use is at its lowest (UNFPA, 2013). The increment in the population of teenage girls implies there would be a rise in the percentage of the population that is sexually active (Makumbi et al., 2021). While teenage period is a critical stage that ushers one into adulthood, the phenomenon of teenage pregnancy has become a major roadblock for many young people during this developmental stage (Anena et al., 2020).

Teenage pregnancy, according to the Ugandan Bureau of Statistics (UBOS) (2018), is defined as being pregnant or giving birth to a child while a girl is between the ages of 10 and 19 years. Although teenage pregnancies have marginally decreased globally (UNFPA, 2013), statistics show that one in six girls worldwide (or around 15%) have given birth before the age of 18 (UNICEF, 2021). Decomposing these statistics across region, country, location within the country (rural vs. urban), and income and education levels, there are remarkable variations (UNICEF, 2021). In low- and middle-income countries, for example, there are about four times as many teenage births compared to high-income countries (UNFPA, 2015; WHO, 2020; 2014).

In sub-Saharan Africa, one in every four young girls (13 million) are giving birth before the age of 18 (Neal et al., 2012; UNICEF, 2021). The region has the higher figure of adolescent birth rates. Among women ages 15–19 years in the region, there are about 103 births per 1,000 women (UNESCO, 2017). These points to the intensity of the menace of teenage pregnancy in the region. Generally, East and Southern Africa have relatively lower rates of teenage pregnancy compared to West and Central Africa (UNICEF, 2021). However, Uganda has one of the highest teenage pregnancy rates in the East Africa region (MOH, 2014). In Uganda, 135 out of every 1000 females between the ages of 15 and 19 give birth to a child each year (MOH, 2014). According to the UBOS (2018), one in four or 25% of Ugandan women have given birth before the age of 18.

Discourse around teenage pregnancy by many scholars revolves around vulnerability and poverty nexus. Philip & Rayhan (2004), in their study of causes of vulnerability and poverty, defined the concept of vulnerability as the exposure to unforeseen events and stress, as well as trouble coping with them. Vulnerability could present itself in many forms including physical, social, economic, geographical location etc. Proag (2014) opined that, the risk level of experiencing vulnerability is influenced by one's capacity to handle or cope with the event. In that context, a society's or a population group's level of vulnerability tend to vary based on social class, ethnicity, age and gender (Schneiderbauer et al., 2017). Thus, the vulnerability to becoming pregnant at teen age particularly in Uganda is complex, mixed and various. In other words, drivers of teenage pregnancy in Uganda are complex and diverse, ranging from harmful cultural practices like child marriage, to poverty, unavailability of affordable contraceptives and general sex education, among others (Gideon, 2013; Vincent & Alemu, 2016; WHO, 2014).

As of 2014, the majority of the households (75%) in Uganda, are being resident in rural areas (UBOS, 2016). More than half (55%) of the country's population is less than 18 years with a high dependency ratio of 97 people per working-age adult. Like in many African countries, poverty and inequality are major challenges with some people still plunged into extreme poverty. This could further increase teenage pregnancy in the country as young people trapped into poverty become more vulnerable to the menace.

Largely, there are various legislative frameworks in Uganda to protect children's rights against adolescent pregnancy and to end harmful cultural practices. Some of these legislative frameworks are international and regional level frameworks which Uganda has been a signatory to. For example, the Convention on the Elimination of All Forms of Discrimination Against Women in 1985, which requires states to ensure free and informed consent to marriage; the Convention on the Rights of the Child (CRC) in 1990, which sets the legal age of marriage at 18; and the African Charter on the Rights of the Child in 1994, which contains article 21 that forbids child marriage. Article 6 of the African Charter on Human and People's Rights, which establishes the legal minimum age for marriage as 18 years old, was ratified by the government of Uganda in 2010. Additionally, the nation started the African Union Campaign to End Child Marriage in 2015 and has co-sponsored resolutions against child, early, and forced marriages at the 2013 Human Rights Council and the 2013 UN general assembly (Girls not Brides, 2022). Further, in collaboration with other partners and UN agencies, the Ugandan government's Ministry of Gender, Labour, and Social Development has established policies, strategies, campaigns, and sensitizations with the goal of ending early marriage and childbearing. Other government policies and initiatives include; the Second National Development Plan (2015/16-2019/20), the 2009 Gender in Education Policy, the National Population Policy, the National Strategy for Girls' Education (NSGE) in Uganda (2015-2019), and Girls not Brides, 2022. Also, the Ugandan Health Policy calls for teenage girls to be readmitted to school after giving birth (MOH, 2014).

Technically, these laws and policies, as enumerated above, are designed to give the government and society the fundamental tools needed to safeguard girls until they are adults (UNFPA, 2013). However, the existence of these legal frameworks, laws and policies is only a part of the strategies to curbing the menace of teenage pregnancy in the country. More practical, proactive and effective mechanisms are required to aggressively reduce the rates of teenage pregnancy and the difficulties faced by teenage mothers in Uganda. Additionally, there is the need for research to provide a clear understanding of the key drivers of this phenomenon in the country and to provide strategies for its curtailment. Against this backdrop, this study sought to identify the trends of teenage pregnancy in Uganda and the degree of vulnerability, investigate the drivers of teenage pregnancy and examine the effects of teenage pregnancy. The study provided culturally relevant solutions and strategies towards reducing teenage pregnancy in the country.

1.1. Problem statement

Uganda as a country has signed unto the United Nation's Sustainable Development Goals (SDGs) which are the universally shared common global vision of progress to be achieved in 2030 (United Nation, 2021). Goals 3 and 5 of the SDGs respectively aimed at ensuring good health well-being, and promoting gender equality. However, efforts to achieve these goals in Uganda could be a mirage if nothing is done to reduce the upsurge of teenage pregnancy in the country. It could also have detrimental impacts on the achievement of SDG 1(ending poverty), SDG 4 (quality education) and SDG 8 (productive employment and decent work). Furthermore, it might stall efforts at harnessing the country's Demographic Dividend by 2040 (UNFPA & NPA, 2022). This is because the burden of healthcare, support, and other health services tend to increase as the frequency of teenage pregnancies rise. Again, it presents a huge barrier for the country to attain a holistic development without leaving any one behind. Additionally, it would significantly affect female education as many girls drop-out of school as a result of pregnancy. Yet the statistics of teenage pregnancy in the country in recent times is quite alarming.

In 2016, 25% of the proportion of women aged 15-19 had given birth or are pregnant with their first child (UBOS, 2018). Almost half of these pregnancies were unwanted (The Republic of Uganda, 2021). Teenage girls in Uganda are faced with multiple vulnerabilities that places them at the receiving end of teenage pregnancy. Young people faced with poverty and financial challenges may resort to survive through early marriages or fall as prey to transactional sex, which all contributes to teenage pregnancy (Byonanebye et al., 2020; Nabugoomu et al., 2020).

In a setting where child marriage acceptability and societal normalcy is high, it is difficult to separate and understand the drivers of teenage childbearing and pregnancy. Uganda has the 16th highest prevalence rate of child marriage in the world and 10th highest in absolute number globally (UNICEF & UNPFA, 2019).

This has implications for the country. The catastrophic psychological effects of teenage pregnancy combined with the inability to continue their education have an impact on the country's future workforce (UNFPA & NPA, 2022). Also, these combined vulnerabilities have a significant impact on the future financial and socioeconomic capacity of the teenage mothers (Gideon, 2013). Therefore, there is need to understand the drivers of teenage pregnancy in the country and to provide strategies to avert future consequence of its impact.

Although extensive research in Uganda has been conducted on teenage pregnancy and its related effects, not much is known on the drivers of and multiple vulnerability to teenage pregnancies in the country. Therefore, using explanatory research design by analyzing secondary data from the 2016 UDHS, this study offers current data on drivers of teen pregnancies in Uganda, and the related multiple vulnerabilities experienced by teen girls to influence teenage motherhood. Results from the study serves as a guide to the government, policy makers, and partners on how to combat the issue of teenage pregnancy and to safeguard vulnerable girls for a better Uganda. More importantly, the study contributes to close a knowledge gap on the drivers of teenage pregnancy in the country.

1.2. Objectives

1. To estimate the trends and patterns of teenage pregnancy in Uganda and establish the degree of vulnerability exposure.
2. To investigate the drivers of teenage pregnancy in Uganda.
3. To examine the effects of teenage pregnancy in Uganda.

1.3. Methodology

1.3.1. Study design

The study adopted a quantitative data explanatory research design. Secondary data source and desk reviews were used to obtain information on teenage pregnancy in Uganda. Inferences were used to establish cause-effect relationships. The study design helped to identify drivers and vulnerability factors associated with teenage pregnancy in Uganda.

1.3.2. Data

The main data source was the 2016 Uganda Demographic and Health Survey (UDHS). The 2016 UDHS was implemented by the Uganda Bureau of Statistics with funding from the Government of Uganda and other international and national health organizations. Technical assistance was provided by ICF International through the DHS Program. The survey was designed to provide data for monitoring the health situation of Ugandan's populace. Precisely, it provides demographic and health indicators such as fertility, sexual activity, marriage, family planning, breastfeeding practices, maternal and child health, nutrition, mortality, HIV/AIDS, malaria treatment and prevention, smoking, tuberculosis, blood pressure among adults and others.

A formal written request was made to the DHS program for the data. This data set helped in identifying the factors contributing to teenage pregnancy in Uganda, as well as the associated risks. Other data sources such as the 2000-2001, the 2006, and the 2011 Uganda Demographic and Health Surveys were used. Also, the authors made use of data from the District health Information System (DHIS). This helped to bring out a clear picture of the trend, and showed the magnitude of teenage pregnancy in the country, thus, providing a road map for finding suitable solutions to the phenomenon.

Additionally, a detailed desk review was done on relevant published reports in order to help provide the current information on the state of teenage pregnancy in Uganda. Such utilized reports include: the 2020 National survey on violence in Uganda; the Ministry of Finance, Planning and Economic Development; the Uganda Population based HIV Impact Assessment (UPHIA) 2016- 2017, and the United Nations Population Fund (UNFPA) reports on teenage pregnancy in Uganda.

1.3.3. Data analysis

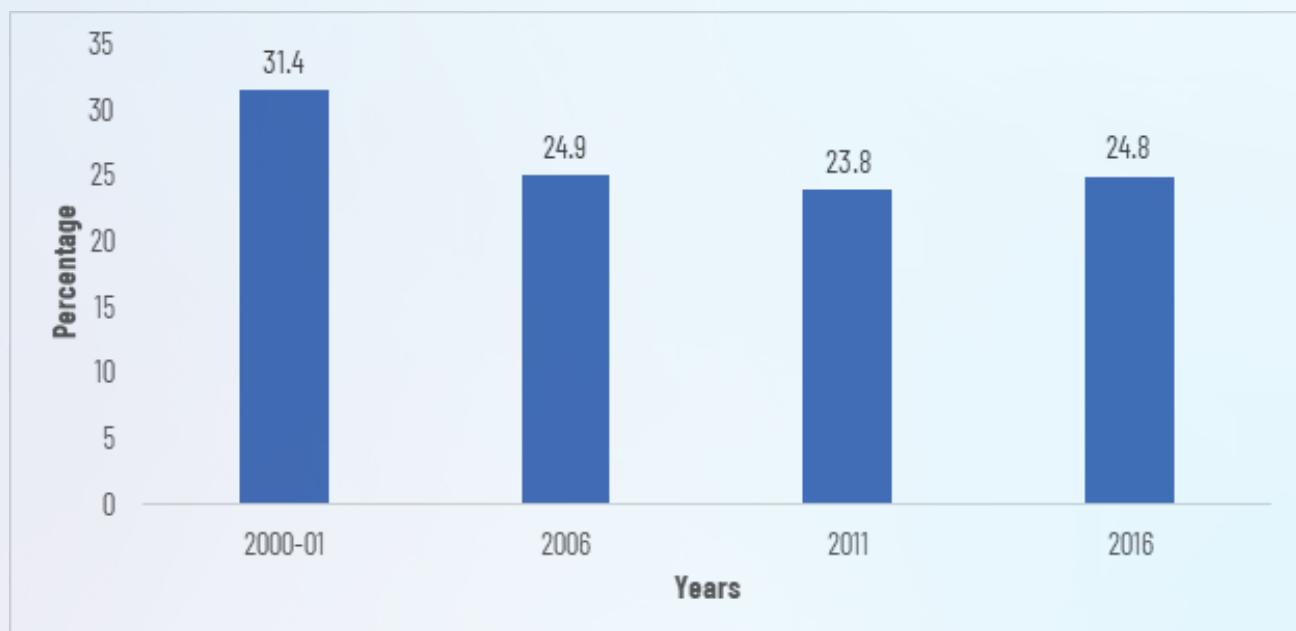
The Statistical Package for Social Sciences (SPSS) tool version 23.0 was used to analyze the data. Descriptive, bivariate and multivariate analyses were carried out. Descriptive characteristics of participants were presented using frequency tables, diagrams, and graphs. At the bivariate level, Chi-square independent test was used to test the association between background characteristics and teenage pregnancy and child bearing; at 95% confidence interval. At the multivariate level, binary logistic regression was used to find out the drivers or factors associated with teenage pregnancy; and multinomial logistic regression was used to find out factors associated with child bearing.

1.4. Findings and Discussions

1.4.1. Trends and patterns of teenage Pregnancy in Uganda (From 2000 to April 2022)

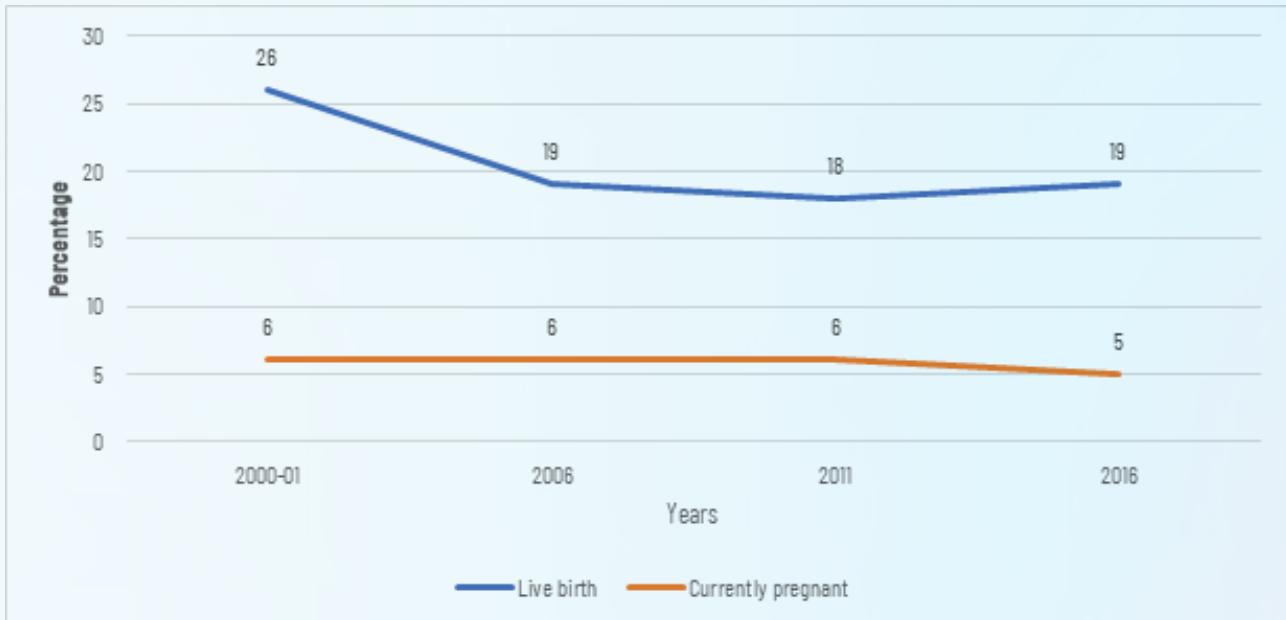
The rates of teenage pregnancy in Uganda have declined from about 31% since 2000-01 to 25% in 2006 (Ministry of finance, planning and economic development, 2021; UBOS 2007; 2001). Between 2011 and 2016, there has not been any significant reduction in teenage pregnancy in the country. The figure stagnated at 24% and 25% in 2011 and 2016 respectively (UBOS, 2018; 2012) as shown in figure 1.1. These alarming statistics makes the country have one of the highest teenage pregnancy rates in the East Africa region (MOH, 2014). In terms of women aged 15-19 who have had a live birth or are pregnant with their first child, the results are not different. In 2000 and 2001, 26% of women aged 15-19 have had a live birth and 6% were pregnant with their first child. As of 2006 and 2012, a slight decline was recorded. The proportion of women within 15-19 years who have had a live birth were 19% and 18% respectively, for 2006 and 2012. The proportion for those who were pregnant with their first child, within the same age group, remained stable at 6% in both years. In 2016, 19% of the women aged 15-19 years have had a live birth, and 5% of them were pregnant with their first child (UBOS, 2018; 2012; 2006; 2000-1) as shown in figure 1.2.

Figure 1.1: Percentage of Teenage Pregnancy (All Women aged 15-19), 2000-01 to 2016



Source: UDHS (2000-01, 2006, 2011, 2016)

Figure 1.2: Percentage of all women aged 15 -19 who have had a live birth and those currently pregnant



Source: UDHS (2000-01, 2006, 2011, 2016)

In terms of absolute numbers, the statistics of teenage pregnancy in Uganda over the period 2016 and 2019 are quite alarming and troubling. Between 2016 to 2019, the figures ranges from 353,644 in 2016 to 358,014 in 2019 (DHIS-2).

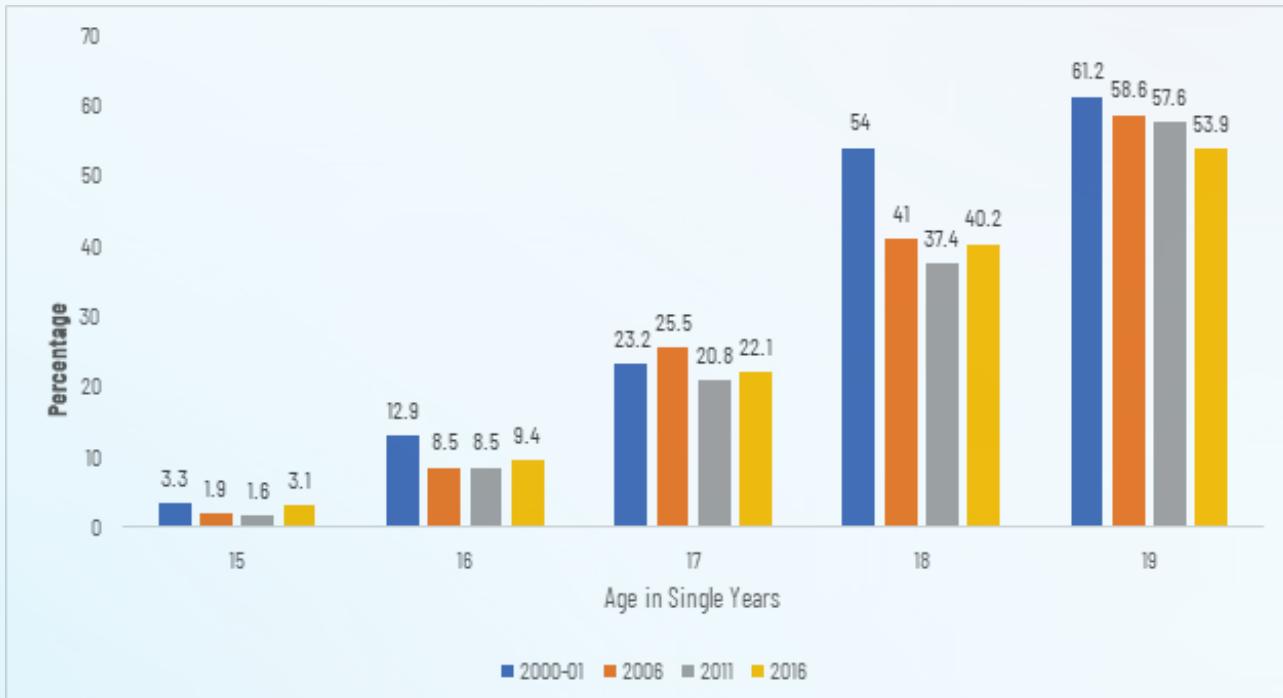
1.4.2. Patterns of Teenage Pregnancy by Background Characteristics and the Degree of Vulnerability Exposure

a) Teenage pregnancy and age

Age is an important demographic variable and has an interplay in a number of reproductive and health outcomes. According to the Uganda Bureau of Statistics (2001), teenage pregnancy among women increases with age. This could be as a result of prolonged exposure to sexual activity. In Uganda, the percentage of women aged 15-19 who have started child bearing rises greatly with age (UBOS, 2018) as shown in figure 1.3

Figure 1.3 shows that, in 2001, teenage pregnancy among women aged 15 was 3.3%, those aged 16 was 12.9%, while those aged 17, 18, and 19 had a rate of 23.2%, 54%, and 61.2% recorded respectively (UBOS, 2001). In 2006, a similar pattern of increase in teenage pregnancies were recorded as the age increases. In that year, the figure rose from 1.9%, for women aged 15 to 59% for women aged 19 years (UBOS, 2007). As of 2011, teenage pregnancy in Uganda, was 1.6% among girls aged 15 to 57.6% among those aged 19 (UBOS, 2012). Finally, the trend of teenage pregnancy as evidenced in the 2016 UDHS is not different from those in previous years. For instance, the proportion of women age 18 and 19 years who were pregnant 40.2%, and 53.9% respectively (UBOS, 2018). Clearly, the proportion of women age 15-19 who have begun childbearing increases dramatically with age as depicted in Figure 1.3. Older teenage girls are highly vulnerable to pregnancy because they are likely to become more sexually active. Their vulnerability could also be heightened by having multiple sexual partners, poor contraceptive use and inadequate information on the availability of contraceptive methods.

Figure 1.3: Percentage of Teenage Pregnancy by Age, 2000-01 to 2016



Source: UDHS 2000-01, 2006, 2011 and 2016

b) Rural verses Urban

Despite a range of efforts made by government and other bodies in Uganda to reduce the rate of teenage pregnancies in the country, not much significant results have been achieved particularly, for girls who live in rural areas. Figure 1.4 presents the rural-urban differentials of teenage pregnancies in Uganda. Between 2000 and 2016, rural teenagers in the country are noted to start parenthood earlier than their urban counterparts (UNFPA, 2013; UNICEF, 2015). In 2000-01, the proportion of teenage childbearing was higher in rural areas at 33.6% than in urban areas (22.5%) (UBOS, 2001). In 2011, the rural areas still had a slightly higher proportion (24.4%) of teenage pregnancy compared to urban young women with 21.4%. Finally, the same trend was observed in 2016 where the rural areas had about 27% teenage childbearing compared to 19% in the urban areas (UBOS, 2012, 2018).

Typically, rural adolescents are highly exposed to teenage pregnancy because of the multiple vulnerabilities experienced such as lack of information and access to sexual and reproductive health services including contraception; which situation could put them at a higher risk of not only becoming pregnant but contracting sexually transmitted infections (STI). Also, rural areas are often associated with low economic status, which situation can easily influence choices like transactional sex and accepting early marriage which may contribute most significantly to higher rates of rural teen births.

Figure 1.4: Percentage of Teenage Pregnancy by Place of Residence, 2000-01 to 2016



Source: UDHS 2000-01, 2006, 2011 and 2016

c) Education level and teenage pregnancy

Teenage pregnancy varies greatly with the woman's education. According to the UBOS report for the 2000-01, 59% of girls with no education had begun their reproductive life compared with 33.1% primary, and 16.7% secondary+ girls (UBOS, 2001). In 2006, 50.2% of girls with no education and 27.9% girls with primary education had begun their reproductive life in comparison to 15.3% girls who had Secondary+ education level (UBOS, 2007). A similar trend was observed in 2011 and 2016. For example, in 2011, girls with no education contributed to 44.5% of teenage pregnancy, while those with primary and secondary+ levels contributed 26.9% and 15.8% respectively (UBOS, 2012). Again in 2016, teenage pregnancy in relation to the level of education was: no education (34.6%), primary (28.7%), secondary (17%), and more than secondary (11%) (UBOS, 2018). From the findings, it can be concluded that teenage pregnancy among women with low education are higher than for those with secondary or tertiary. Hence, education is a major protective factor for teenage pregnancy as the more years of schooling, the fewer early pregnancies (WHO, 2014).

d) Region and Teenage Pregnancy

Teenage pregnancy also varies by region. This is evidenced in the statistics provided in the various UDHS data and reports. In 2000-01 for instance, teenage pregnancy was highest in the Eastern (36.5), Northern (34.3), and Central (31.2), than those in the Western (24.3). In 2006, teenage pregnancy was highest among girls living in the internally displaced persons (IDP) camps at 43%, those in the North at 34% and in the Eastern at 31%. On the other hand in 2011, the highest teenage pregnancy rates were reported in East Central (30.6%), Eastern (30.3%), and Karamoja regions (29.7%), while Southwest region has the lowest (15%) (UBOS, 2012; Doctors with Africa, 2020). Finally in 2016, teenage pregnancy in women aged 15-19 varied from 16% to 17% in Kigezi and Kampala regions to 30% to 31% in North Central, Bukedi, Teso, and Tooro regions (UBOS, 2018). From the findings, the East Central region consistently had the highest rates than other regions (Byonanebye et al., 2020). Some of these regions are characterized with: a multi-ethnic population; refugee hosting communities, cultural diversity due to mixed population, and high prevalence of child marriage, which factors make teenage girls living in these regions more vulnerable to teenage pregnancy.

1.5. Drivers of teenage pregnancy in Uganda and the degree of vulnerability exposure

The drivers of teenage pregnancies in Uganda are complicated, multidirectional, and multidimensional. Factors that were associated with teenage pregnancy at the bivariate level have been added into the binary logistic regression as shown in the table 1.1 below.

Table 1.1: Binary Logistic Model of Predictors of Teenage Pregnancy in Uganda

Variables	OR 95% C.I	Sig. (p-value)
Age	0.92 [0.91, 0.93]	.000
Region		.001
Kampala (RC)	1.00	
South	0.79 [0.53, 1.19]	.254
North	0.95 [0.70, 1.30]	.744
Busoga	0.98 [0.72, 1.34]	.892
Bukedi	1.20 [0.88, 1.64]	.250
Bugisu	1.23 [0.89, 1.70]	.215
Teso	0.75 [0.52, 1.08]	.122
Karamoja	0.92 [0.65, 1.30]	.630
Lango	0.99 [0.64, 1.55]	.994
Acholi	0.87 [0.61, 1.23]	.416
West Nile	0.90 [0.62, 1.29]	.552
Bunyoro	0.78 [0.55, 1.11]	.168
Tooro	0.63 [0.44, 0.90]	.012
Ankole	0.89 [0.64, 1.24]	.491
Kigezi	0.82 [0.59, 1.14]	.236
Place of Residence		
Urban (RC)	1.00	
Rural	1.13 [0.96, 1.32]	.141
Educational Level		.227
No Education (RC)	1.00	
Primary	1.21 [0.88, 1.66]	.246
Secondary	1.29 [1.01, 1.66]	.044
Higher	1.23 [0.96, 1.58]	.098
Wealth Status		.088
Poorest (RC)		
Poor	1.29 [1.03, 1.64]	.030
Middle	1.27 [1.02, 1.58]	.035

Variables	OR 95% C.I	Sig. (p-value)
Age	0.92 [0.91, 0.93]	.000
Rich	1.29 [1.05, 1.61]	.018
Richest	1.09 [0.89, 1.33]	.416
Religion		.028
Anglican		
Catholic	1.13 [0.70, 1.83]	.605
Muslim	1.02 [0.63, 1.64]	.937
SDA	0.97 [0.59, 1.58]	.888
Pentecostal	1.51 [0.84, 2.74]	.172
Other	1.26 [0.77, 2.06]	.351
Ever used contraception		
Yes (RC)		
No	1.44 [1.28, 1.62]	.000
Marital Status		.000
Not in Union	1.00	
In Union	0.33 [0.27, 0.40]	.000
	2.99 [2.44, 3.66]	.000
Age at First Sex	1.04 [1.02, 1.05]	.000
Age at first Cohabitation	0.99 [0.99, 1.00]	.434
Occupation		
Employed	1.00	
Unemployed	1.04 [0.90, 1.20]	.573
Constant		.000
Correct % Prediction	87.40%	
Hosmer and Lemeshow Test	0.00%	
Nagelkerke R ²	12.80%	
Model Chi-square (df)	962.60 (33)	

Source: Author's Analysis Based on UDHS 2016

Results from the table show that age, region, religion, ever used contraception, marital status, and age at first sex significantly influences teenage pregnancy. However, place of residence, education level, wealth status, age at first cohabitation, and occupation were observed not to be significantly related to teenage pregnancy. None the less, descriptive findings from the 2016 UDHS show that some variables like education and wealth status are related to teenage pregnancy. These findings have been discussed below.

1.5.1. Poverty

Poverty is a major cause of girls' vulnerability to teenage pregnancy (Bantebya et al., 2013). Findings by the 2016 UDHS indicate differences in the rates of teenage pregnancy according to wealth quintile, where by the percentage of teenagers who had begun childbearing in the poorest households was 33.5% compared with only 15.1% in the wealthiest households (UBOS, 2018). Numerous factors account for multiple vulnerabilities experienced by teenage girls who are poor to result into pregnancy. These include: higher prevalence of child marriage as families faced with poverty regard girls as a source of wealth and a solution to household poverty thus marrying them off early to receive dowry (UNICEF, 2015). Also, other research done in Uganda show that poverty makes young females participate in transactional intercourse with rich boys and men in order to meet their basic needs, which make them vulnerable to sexual exploitation (Anena et al., 2020; Ministry of Finance, Planning and Economic Development, 2020; Nabugoomu et al., 2020). Sexual relationships for monetary and material gains increases power difference where by the teenage girls are unable to ask for safe sex which consequently results into undesired pregnancies and increased chances of contracting STIs.

1.5.2. Lack/ Low Education Levels

Teenage pregnancy is more likely to occur in marginalized girls with lack of education (UNFPA (2013; WHO, 2020). In 2016 in Uganda, for instance, the percentage of teenagers who had begun childbearing was highest among those with no education standing at 34.6% compared with, only 11%, of those who had more than secondary education (UBOS, 2018). Moreover, women who have never been to school are likely to have too many children (four or more births); as well as a contributing factor to early marriage as research shows that the proportion who are married reduces from 8% among girls as the level of education increases to 6% (UBOS, 2017). Schooling empowers girls and increases their knowledge of sex education. This is crucial for decisions involving sexual intercourse as well as delayed marriage, delayed pregnancy and better motherhood. Also, while at school, enables supervision of teenage girls by their teachers and parents when back at home which could reduce chances for sexual activity. These privileges are not enjoyed by teenage girls who are out of school; and hence vulnerable to idleness, poverty, limited knowledge on sexual and reproductive health, and group influence, which entice the girls into sexual relationships that exposes them to pregnancy.

1.5.3. Early Marriage

Uganda is home to five million child brides, and of these, 1.3 million were married before age 15 (UNFPA & UNICEF, 2020). The 2016 UDHS found that about a fifth (20%) of teenage girls aged 15-19 were already married or living with a man, and 3% of women age 15-19 were married by age 15 (UBOS, 2018). Additionally, the UBOS (2017) noted that one in every ten 10-17 year olds in Uganda were in a marriage relationship (7%). This supports a study by Byonanebye et al. (2020) who found that teenage pregnancy was significantly associated with being married, living with a partner or separated, as compared to those who were single. More so, over 30,266 children in Uganda were found to either be widowed or separated, which calls for further investigation to inform Sexual and Reproductive health interventions (UBOS, 2017).

Some factors that make girls vulnerable to early marriage is pressure from family and society to marry and bear children (Anena et al. 2020). Moreover, married adolescents are likely to become pregnant and give birth in accordance with social norms (WHO, 2014). In addition, other studies have indicated that living in rural and remote areas has an influence on teenage pregnancy. For example, rural women in Uganda are more likely to engage in early marriage than their urban counterparts. This is because it is believed that the higher levels of school attendance among urban adolescents tends to discourage early childbearing (UBOS 2017; 2007).

1.5.4. Early Sex Debut

In Uganda, many young people are sexually active by the age of 17 years, which exposes them to pregnancy (National Population Council, 2018). In 2016, about 10% of girls aged 15-19 in Uganda, have had sex, while 9.9% of 15-17 years, and 11% of 18-19 age group have already had sex (UBOS, 2018). In 2020, about 31% of adolescents in the same age group were reported to have ever had sexual contact (UNICEF, 2020). The percentage of teenagers engaging in sexual activity indicates minimal change in trends regarding perceptions and attitudes toward early sex debut. Teenagers are exposed to early sexual initiation due to increased social media accessibility and pornographic sharing on websites like Facebook, Instagram, YouTube, and WhatsApp (Anena et al., 2020). This sexual information exacerbates their sexual curiosity and are therefore enticed to try out as they have seen (Manzi et al., 2018).

Furthermore, early sex debut is associated with peer pressure. Besides being young in age and having multiple myths about sex and sexuality, teenage girls with friends who are sexually active can easily be influenced to involve in unprotected sexual activity and other risky behaviours such as alcoholism and drug abuse which could lead to pregnancy (Ochen et al., 2019).

1.5.5. Cultural and Religious Beliefs

According to Nabugoomu et al. (2020), cultural beliefs promote early marriage as well as teenage pregnancy, which could explain why there is high teenage pregnancy rate in some regions in Uganda than others. For example, the highest rates of teenage pregnancy ranged from 30% to 48% in North Central, Bukedi, Teso, Tooro regions, and the Island districts (UBOS, 2018). Some of these regions comprise of districts with characteristics like having a multi-ethnic population; refugee hosting communities, cultural diversity due to mixed population, and high prevalence of child marriage (UNICEF, UNFPA, Ministry of Gender, Labour and Social Development, 2021; UNICEF, 2020; UNHCR, 2021).

More specifically, traditionally, female teenagers in Uganda are seen as a source of wealth and income in the form of bride price (Anena et al., 2020; Sekiwunga, 2009), which increases the girls' exposure to teenage pregnancy in addition to cultural and social pressure to marry young and start having children early. Additionally, cultures influence parents' preconceptions that severely restrict discussion about adolescent sexuality and reproductive health issues in household settings, leaving teenagers vulnerable to pregnancy. Some studies indicate that some parents shy away from talking to their daughters about sexual and reproductive issues (Svodzwa et al. 2016; Sekiwunga, 2009; Mbugua, 2007). Others disregard discussing with their children on issues of STIs, condom use, HIV/AIDS and physical development (Svodzwa et al. 2016; MOH, 2014). Given that as teenagers get older, their sentiments and curiosity about sex develop, poor parent-teenager communication about sex and reproductive health impacts adolescent girls' ability to make informed decisions when faced with rising sexual pressure (Manzi et al., 2018; National Population Council, 2018). Due to their drive for adventure and to learn more about the world around them without proper information, unguided youths are more likely to engage in sexual activity and teenage pregnancy after they are discovered (Anena et al., 2020; Manzi et al., 2018).

Effective communication on issues relating to sexual and reproductive health is often hampered by religious ideas over what is acceptable or not. For instance, in Uganda, the Catholic and Anglican churches opposed the government's 2018 announcement of a policy on sexual education that emphasized abstinence from sex as well as the use of contraception and condoms. The churches believe that sexual education for teenagers will degrade their morals and that access to contraception is wicked and an insult to procreation (Ojulu, 2021).

1.5.6. Low Contraceptive Use/ Acceptance

Inability to control for pregnancy through contraceptive use results into unwanted teenage pregnancy (Nabugoomu et al., 2020). In 2016, about 9% of currently married and sexually active unmarried girls aged 15-19 had currently used some kind of modern contraceptive method. Also, only 0.6% of currently married and sexually active unmarried girls aged 15-19 had currently used traditional contraceptive method. On the other hand, 90% of currently married and sexually active unmarried girls aged 15-19 had not used any contraceptive method (UBOS, 2018).

Additionally, the survey indicates that 30.4% of married adolescent girls (15- 19 years) had unmet need for family planning (for spacing and limiting) in 2016 (UBOS, 2018). There are multiple factors that impeded adolescents' access to contraception despite the persistent high levels of teenage pregnancy, including: long distance from home to SRH facilities, and high cost of services (Mambo et al., 2022). Also, unwelcoming health care providers make it hard for adolescents and young people from seeking reproductive health information and services such as contraceptive methods, abortions, STI problems (Amuyenzu-Nyamongo et al., 2005).

1.5.7. Sexual Abuse and Exploitation

In Uganda, violence against women and girls remains particularly widespread, as more than half of the girls have experienced childhood sexual abuse (UBOS, 2020). In 2016, more than 1 in 5 (22%) women, in Uganda, have ever experienced sexual violence in their lifetimes (UBOS & ICF, 2018). Nearly, 10% of girls age 15-19 reported ever experiencing sexual assault, with more than half of these women experiencing it in the year preceding the 2016 UDHS survey (UBOS, 2018). This alarming situation is confirmed by a report given by the Ministry of Finance, Planning and Economic Development (2021), that noted that, for every 10 children in Uganda, 8 (84%) of them have been sexually abused in the day and night, mainly on the roadside and in natural fields. The sexual abuse and exploitation of young girls exposes them to teenage pregnancy, which partly explains the unchanging level of teenage pregnancy in Uganda (Nabugoomu et al., 2020; UBOS, 2020). Furthermore, failure to address childhood sexual abuse will lead to the continuation of teenage pregnancy by 50% each year (UNFPA, 2022).

1.6. Effects of Teenage Pregnancy In Uganda

1.6.1. Health

a) Maternal mortality

The consequences of teenage pregnancy to the mother are severe, including death which occurs during pregnancy and delivery (UNICEF, 2015; UNFPA and NPA, 2022; Ministry of finance, planning and economic development, 2021). In 2016, for instance, teenage mothers contributed about 30% of maternal deaths in Uganda (UBOS, 2018). This calls for the country's urgent attention to the crisis. Studies indicate that pregnancy and child birth for many teenagers is neither planned, nor wanted, resulting into abortions (Ministry of finance, planning and economic development, 2021; Plan International, 2022). For countries like Uganda where abortion is prohibited or highly restricted, teenage girls resort to unsafe abortion, which risks the lives of these girls to maternal mortality and morbidity (Plan International, 2022). The major cause identified to contribute to maternal mortality in teenage mothers is inaccessibility to adequate reproductive health care (UNICEF, 2019), and this needs addressing.

Maternal mortality is also known to be influenced by pregnancy and birth difficulties. Teenage girls are far too likely to experience complicated births that necessitate emergency obstetric care, and these complications are brought on by their undeveloped bodies (Plan International, 2022; UNICEF, 2019). In 2018, at least 0.5% of all teenagers who had a live birth experienced fistulas symptom, while others had higher chances of experiencing intrauterine growth (Anena et al., 2020). Additionally, having a C-section is much more likely to occur with teenage pregnancies, especially once labor pains start (UBOS, 2018). All of these could raise the rate of maternal mortality.

Finally, early sexual activity increases the risk of contracting sexually transmitted infections especially HIV/AIDS (MOH, 2019; Anena et al., 2020). In 2016, about 6% of teen girls reported Sexually Transmitted Infection (STI) symptoms. In 2019, the Uganda Population-based HIV impact assessment established that about 2% of young girls aged 15-19 years had tested positive for HIV, which translates to about 4,291 young women affected. According to a 2019 report by UNICEF, 66% of all new HIV infections are contracted by teenage girls. In Uganda, the HIV prevalence is almost four times higher among females than males aged 15 to 19 (MOH, 2019). HIV tends to increase chances of mortality in mothers if proper health care is not sought, as well as increases the risks of mother to child HIV transmission.

b) Infant and childhood mortality

Teenage pregnancy is a major contributory factor to neonatal, infant and under-five mortality in Uganda. In 2016, teen mothers under age 20 accounted for 34 deaths per 1,000 live births for neonatal mortality; while Infant and under five mortality rates accounted for 55 deaths per 1,000 live births, and 84 deaths per 1,000 live births respectively (UBOS, 2018). The Ministry of Finance, Planning and Economic Development (2021) report have noted that teenage pregnancy accounts for about one-fifth (20%) of the Infant deaths in Uganda. Similar observations are made by Plan International (2022) and Anena et al. (2020). These studies found that babies born to teenage mothers are at a greater risk of mortality and preterm/ stillbirth. This is because teen mothers are less likely to utilize antenatal services, may lack social and financial support to enhance the utilization of delivery services, and could be biologically not ready for safe childbearing (UBOS, 2001).

The issues of teenage pregnancy and its concomitant effects of infant and child survival has implication for Uganda in harnessing her Demographic Dividend as well as achieving the SDGs. Primarily, the achievement of the SDGs and Demographic Dividend are all hinged on mortality decline, especially infant and child mortality (Ministry of finance, planning and economic development, 2021; UNICEF, 2019). This therefore calls for immediate interventions that seek to have teenage pregnancy reduced in the country.

c) Economic effects

There is an abundance of knowledge on negative impact of teenage pregnancy (TP) on livelihoods, health and future social economic productivity as most of these girls lack skills and academic qualifications to take up formal employment opportunities. According to a report by the Ugandan ministry of finance, planning and economic development (2021), teenage mothers are three times less likely to have professional jobs, while 47% are likely to end up being self-employed in peasant agriculture. Other estimations by UNFPA (2022) indicate that, about 60% of teenage mothers will end up in peasant agriculture. This leads to lower income levels among the girls and an aftermath effect on their affects their standard of living and contribution to productivity (The ministry of finance, planning and economic development, 2021).

At the individual, household, and societal levels, teenage pregnancies can result in higher financial costs. For instance, in 2016, about 79% of adolescent mothers gave birth in a health facility. As a result, adolescent mothers were estimated to spend Ug.sh. 791.5 billion on normal deliveries and care of newborns in the year 2019/20. On the other hand, at the household level, families of all teenage mothers were estimated to have spent Ug.Shs. 1.28 trillion (290 million USD) on teenage mothers in 2020 on Sexual Reproductive Health; and Ug.Shs. 246.9 billion (70 million USD) on health facility expenditure. At the national level, Uganda as a country is estimated to spend Ug. shs. 645 billion (181.8 Million USD) annually on health care for teenage mothers and education of their children (The ministry of finance, planning and economic development, 2021; UNFPA, 2022). Generally, unproductive/ under-productive populations are an impediment to development, thus an impact to harnessing of the Demographic Dividend (The ministry of finance, planning and economic development, 2021). Also, this has implication for achieving the SDGs, especially goals 1, 5, and 8 (ending poverty, gender equality, and productive employment and decent work respectively).

1.6.2. Social

a) School dropout

Teenage pregnancy has negative impacts on education as it leads to early school dropout in late primary and early secondary school years, hence dashing the plans of skills development and career formation for turning the country's abundant human resource into human capital. Statistics indicate that about 64% of teenage mothers will not complete primary education level because of unwanted teenage pregnancy and early marriage. Additionally, teenage mothers are six times less likely to complete secondary education compared to non-teenage mothers (Ministry of finance, planning and economic development, 2021; UNFPA, 2022).

In the event that the teenage girls decide to discontinue school after discovering that they are pregnant, the parents/guardians kick the pregnant teenager out of the home, or the school authorities formally expel the teenager for being pregnant; whichever way it plays out, the teenage girls quit school on account of their pregnancy (Ministry of finance, planning and economic development, 2021; UBOS, 2018). Failure to complete school affects the future careers and education aspirations of these teenagers, and this impedes the achievement of SDGs 4 (quality education), goal 5 (gender equality); and goal 8 (productive employment and decent work). Also, despite the existence of policy allowing teenage mothers to return to school, they are usually stigmatized, which leads to school dropouts (Budget Monitoring and Accountability Unit (BMAU), 2020; UNICEF, 2015).

b) Stigma and rejection

Unmarried pregnant adolescents may face stigma or rejection by parents and peers (Plan International, 2022; WHO, 2020). Atuyambe et al. (2005) notes that there is a social stigma associated with pregnancy outside wedlock which is a shame to the family hence families are being forced to send their pregnant daughters away. This leads to withdrawal of social support to the teenager, thus affecting them psychologically, as well as creating further complications such as poor nutrition, and abortion (Ministry of finance, planning and economic development, 2021).

Furthermore, teenagers who become pregnant before age 18 are more likely to experience violence within a marriage or partnership (Plan International, 2022). This is evidenced in the 2016 UDHS where violence during pregnancy among age group 15-19 was 10.4% (UBOS, 2018), which has an implication for life. For example, the Ministry of finance, planning and economic development (2021) indicates that teenage mothers may continue to suffer the most from deaths arising from abortions due to gender based violence (48% of these death are teens).

1.7. Conclusion

Teenage pregnancy is a complex phenomenon in Uganda, which has increasingly become a major burden to teen mothers and their children, their families, as well as the government. This study provided a clear picture on the mixed factors leading to the upsurge of teenage pregnancy in Uganda. Evidence from this study shows that multifaceted interventions are required to tackle the issue of teenage pregnancy in the country. These interventions should be aimed at putting the needs of the teenage girl at the center, acknowledging the role of the health care system, the school system, and the community. Results from this study serve as a guide to teenage pregnancy policies that are culturally relevant; as well as providing a comprehensive sectorial approach that integrate reproductive health education in school curriculum and religious gatherings so as to increase knowledge about sexuality and reproduction among adolescents.

1.8. Recommendations

Based on the findings from the study, the following recommendations are proposed;

1. A bottom-up approach should be adopted in relation to teenage reproductive health policies formation and implementation. This ensures grass root involvement by all stakeholders including local communities, traditional, and religious leaders; as well as both male and female teenagers to have a clear interpretation of certain concepts such as who is a child, what is child marriage, among others.
2. The Uganda Ministry of Education should put in place clear re-entry guidelines for teenage mothers to go back to school after they have given birth.
3. Efforts towards sensitizing people against stigmatizing pregnant girls and young mothers who return to school are needed.

4. The Ministry of Gender, Labour and Social development, the Ministry of Education under the gender unit, the various education departments at the districts and local governments, should intensify the sensitization, on issues of child marriage, teenage pregnancy, and the importance of girls' education, to communities and parents. This will involve using multiple communication channels such as community dialogues and gatherings, use of mass medias such as radio and television programs and talk shows, publishing articles in newspapers, sensitizations through music, dance, and drama. Others could include school outreach programs, peer education, and use of role models and mentorship. These channels will reach a wider audience in both rural and urban areas.
5. The Ugandan Ministry of Health should intensify sexual and reproductive health education through the introduction of adolescent health corners to increase knowledge in sexual and reproductive health. The adolescent health corners would create teenage-friendly environments at the health care facilities to encourage utilization of the available sexual and reproductive health services. In communities where access to health care centers is hard, mobile sexual and reproductive health services including contraception can be provided by community health workers.

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2.0. Introduction

Uganda is known for its young age structure with about 76% of the population below the age of 30 years (UNDESA 2022). The country would see an opportunity for a thriving economy and consequently an enhanced development soon if they choose to invest in this youthful population. The investment partly comes in easing access to quality health care, education, jobs, and improvement in the country's governance (Bloom, Canning, and Sevilla 2003). From the ICPD 1994, the priority shifted from reducing fertility to improving the SRHR of men and women. Even though government and development partners have jointly made positive progress towards this commitment by ensuring that adolescents keep in school plus the stringent measures against forced and early marriages leading to a steady decline in adolescent fertility during the early years, the current state shows that if the government does not strengthen its SRHR goals in NDP 3 and the respect of SDG 3, the adolescent age-specific fertility rates (ASFRs), are likely to remain relatively high by either stalling or reversing the downward trend. This article seeks to understand the declining ASFRs among adolescents at stalled teenage pregnancy rates over the last two decades from 1995 through 2016. Lessons from the study are important for future direction of adolescent fertility and their SRH in general.

In Uganda, a quarter (25%) of women aged 15-19 have begun childbearing (UBOS and ICF 2018). This proportion increases drastically with age, rising from 3% among women aged 15 to 54% among women aged 19 years (UBOS and ICF 2018). Teenage pregnancy contributes to nearly one-fifth of annual births in Uganda and nearly half (46%) of the pregnancies are unwanted (UBOS and ICF 2018). Unfortunately, the COVID-19 pandemic has escalated adolescent sexual reproductive health (ASRH) challenges (Kons, Biney, and Sznajder 2022) and Uganda is no different. These challenges are attributed to adolescents being out of school, continued exposure to sexual demands from adults, limited SRH supplies, and almost impossible access to the little supplies given the difficulties in movements (Burt et al. 2021; Sserwanja, Kawuki, and Kim 2021). This increased the risk of exposure to intercourse without the use of contraceptives resulting in pregnancies and sexually related complications. In 2021 alone, daily teenage pregnancies rose to 1,052 from 985 and 994 in 2020 and 2019 respectively (UNFPA Uganda 2022).

A woman who bears in her teenage years is widely exposed to various pregnancy-related complications and the risk of dying from such complications is twice as high as that of a woman who starts childbearing in her 20s (PRB 2013). With a population of over 45 million people, Uganda's adolescent population (age 10-19) contributes to nearly a quarter of the total population (UNDESA 2022). Given Uganda's age structure, this proportion of the population will significantly continue to rise in the coming decade. The current and future adolescent population trends imply that the country has to more than double its efforts aimed at meeting their sexual and reproductive health needs which in turn would ensure that such a population starts childbearing in later years that pose a lesser risk to their lives. Not acting now implies that the country risks losing a significant proportion of adolescents to preventable conditions hence curtailing their potential to realize the Demographic Dividend.

There is more to be done especially with the implementation of safe spaces where ASRH services such as counseling, education about contraceptive use, and provision of contraceptives are brought closer for improved service delivery which in turn ensures the country of a healthy and reliable population towards her development strategy. This paper, therefore, uses a systematic review and analysis of the Uganda Demographic and Health Surveys (UDHS) from 1995 through 2016 to show the best practices that have in the past impacted fertility decline among adolescents, revealing the rising needs that may stall the decline or reverse the downward trend, and proposes policy recommendations that would maintain the country's gained progress hitherto.

2.1. Problem Statement

There has been a recognizable decline in Uganda's adolescent fertility from 1995 through 2016. However, the proportion of teenage pregnancies has stalled for the last 10 years (2006–2016). With an almost stalled decline in the adolescent fertility rate between the last 5 years (2011–2016), there is a cause for the country to worry about whether its teenage pregnancies will eventually decline and if the adolescent fertility rate does not continue to stall or even reverse the declining trend. Even though the country has implemented several strategies that saw both teenage pregnancies and the adolescent fertility rate decline in the early years, the stalling signals that there is more that must be done while maintaining what has worked in the past. It is, therefore, important to understand how adolescent fertility has declined since 1995, reveal possible explanations for the stalling, and establish whether the adolescent fertility rate will continue stalling, declining, or instead reverse the downward trend.

2.2. Main Objective

The main objective is to understand the decline in adolescent fertility in Uganda in the period 1995–2016.

2.2.1. Specific Objectives

- To find out how demographic factors are associated with adolescent fertility decline in Uganda.
- To investigate the association of socioeconomic factors and adolescent fertility decline in Uganda.
- To establish trends in adolescent fertility decline in Uganda.

2.3. Methodology

This paper draws on a systematic review and analysis of the UDHS reports from 1995 through 2016 (Planning/Uganda and International 1996; UBOS and ICF 2012, 2018; Ubos and International 2007; Ubos and Macro 2001) to understand the decline in adolescent fertility in Uganda. Additionally, the study draws on logistic regression adjusted for socio-economic and demographic factors of UDHS datasets to estimate cohort analysis predictions of the odds of an adolescent currently being pregnant at the time of the survey or having born a child in the five years preceding the survey from 1995 through 2016.

2.3.1. Data and Study Design

This study used data from nationally representative DHS(s) of Uganda from 1995 through 2016, to investigate the decline in adolescent fertility. The UDHS(s) are nationally representative cross-sectional surveys that use a two-stage cluster sampling procedure to generate samples of women and men aged 15–49 and are collected after every 5 years (ICF International 2012). We relied on women's data from 1995 through 2016.

These nationally representative surveys involved two sampling stages. In the first stage of sampling, enumeration areas were selected from national census sampling frames. In the second stage, households in each cluster were randomly selected from complete listings of households in each of the enumeration areas selected in stage one. Representative samples of 8,093; 8,792; 9,864; 10,086; and 20,880 households were drawn for surveys in 1995, 2000/1, 2006, 2011, and 2016 respectively (Planning/Uganda and International 1996; UBOS and ICF 2012, 2018; Ubos and International 2007; Ubos and Macro 2001).

All women aged 15–49 who were either permanent residents or visitors at the selected households the night before the survey were included and eligible for individual interviews. Finally, 7,070; 7,246; 8,531; 8,674; and 18,506 women were interviewed from the selected households respectively in 1995, 2000/1, 2006, 2011, and 2016. Survey response rates fell between 93.8% and 97% over the years. This article focused on women aged 15–19 who responded to the question seeking to understand whether they have ever given birth and if they were pregnant at the time of the interview.

All the samples were weighted upon analysis. This study analyzed data and focused on findings from 1,606; 1,614; 1,936; 2,048; and 4,264 women from 1995, 2000/1, 2006, 2011, and 2016 respectively.

Additionally, statistics on key selected indicators including age-specific fertility rates for adolescents (15-19), teenage pregnancy rates, contraceptive use rates, and proportion of married women were extracted from the UDHS reports published between 1995 and 2016. Access to both the women's records and official reports was granted by the DHS program and all data has been used following the provided terms of use.

2.3.2. Variables and Statistical Analysis

The dependent variable for this study was whether the woman had started childbearing. In the DHS questionnaire, all women are asked whether they gave birth in the five years preceding the survey and if they are currently pregnant at the time of the survey. The two questions elicit a response of yes or no to whether a woman has started childbearing or not. The independent variable of interest is age and we controlled for marital status, residence, education level, and contraceptive use. Control variables were selected based on previous studies (Byonanebye et al. 2020; Gunawardena, Fantaye, and Yaya 2019; Ochen, Chi, and Lawoko 2019; Wasswa et al. 2021) teenage pregnancy is a public and community health issue. In Objectives: This study hypothesized that there would be regional variations in rates, risk factors and trends of teenage pregnancy in Uganda. In Methods: Data were analyzed from the Uganda Demographic and Health Surveys (UDHS). Age was categorized into groups of 15, 16, 17, 18, and 19-year-olds. Marital status was recategorized, to distinguish between never married, currently married, and formerly married; residence was classified as rural and urban. Education level of the woman was grouped into no education, primary, secondary, and higher and finally, contraceptive use was distinguished between users (yes) and non-users (no).

Univariate analysis was used to summarize and describe the variables by establishing their percentage distributions. To establish the percentage distribution of the adolescents who had already started childbearing, chi-square tests were run (at the bivariate level) between each independent variable and the dependent variable given the categorical nature of all variables. Significance at the bivariate level was attained at a p-value of less than .05. Since the dependent variable elicits a dichotomous response of "yes" (1) and "no" (0) on whether one had started childbearing, logistic regression was used at a multivariate level to determine the association of each explanatory variable on the dependent in the presence of other variables (Stephanie 2016). The model estimated the probability of falling into any of the two dichotomous values (0 or 1) of the dependent variable given the effects of the independent variables and significance was attained at a p-value of less than .05

The model takes the form;

$$\text{logit } \left(\frac{p}{1-p} \right) = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_kx_k$$

Where;

- p is the probability of having started childbearing
- 1-p is the probability of not having started childbearing
- α is a constant
- b b is a coefficient associated with independent variables
- x are independent variables.

2.4. Findings

2.4.1. Background Characteristics of Respondents

Table 2.1 shows the percentage distribution of respondents by their background characteristics across the five survey periods from 1995 through 2016. Over the years, it is revealed that the number of adolescents who started childbearing declined especially between 1995 from 42.8% through 2006 at 24.9%, after which, it stalled. Similarly, the proportion of adolescents who never married and those currently married increased and decreased respectively just until 2006, and they both later stalled through 2016. The analysis did not reveal huge variations in the distribution of adolescents across ages 15-19 and because Uganda is more rural than urban, the majority of the respondents (over 75% throughout the analytical period), resided in rural areas.

Table 2.1 Percentage distribution of adolescents by selected demographic and socioeconomic characteristics (1995-2016).

Variables	1995	2000/1	2006	2011	2016
Started Childbearing					
No	57.2	68.6	75.1	76.0	75.2
Yes	42.8	31.4	24.9	24.0	24.8
Marital Status					
Never married	50.1	67.7	77.6	77.3	77.2
Currently married	47.1	28.9	19.6	19.6	19.9
Formerly married	2.8	3.4	2.8	3.1	2.9
Age					
15	18.1	18.6	24.1	23.8	20.4
16	21.1	21.0	21.2	20.1	22.7
17	17.5	19.0	17.9	17.6	18.6
18	24.4	23.5	19.6	20.1	20.0
19	18.9	18.0	17.2	18.5	18.4
Residence					
Rural	82.8	80.6	82.3	70.3	75.8
Urban	17.3	19.4	17.7	29.7	24.2
Education level					
No education	16.6	9.1	3.5	5.5	1.8
Primary	67.2	66.1	66.7	62.3	64.7
Secondary	16.2	24.1	28.5	30.8	31.7
Higher	-	0.6	1.3	1.4	1.8
Contraceptive use					
No	92.8	89.6	93.5	93.4	90.0
Yes	7.2	10.4	6.48	6.6	10.0
Observations (N)	1606	1614	1936	2026	4264

Source: UDHS data, 1995-2016

The analysis reveals that the proportion of adolescents obtaining secondary education has doubled from 16.2% in 1995 to 31.7%. Overall, it is also revealed that the non-use of contraceptives remains very high at 90% and above.

2.4.2. Bivariate Analysis Results of childbearing

Table 2.2 Percentage distribution of adolescents by childbearing (1995-2016).

Variables	1995	2000/1	2006	2011	2016
Marital Status					
Never married	805 (9.7)***	1094 (13.9)***	1502 (21.7)***	1566 (20.8)***	3292 (23.2)***
Currently married	756 (84.7)***	466 (77.1)***	380 (68.2)***	397 (67.9)***	850 (66.7)***
Formerly married	45 (5.7)***	54 (9)***	54 (10.2)***	63 (11.3)***	121 (10.0)***
Age					
15	290 (3.2)***	300 (2.0)***	466 (1.8)***	482 (2.1)***	871 (2.6)***
16	339 (10.9)***	339 (8.6)***	411 (7.2)***	407 (7.4)***	966 (8.5)***
17	281 (17.7)***	306 (14)***	346 (18.3)***	356 (16.1)***	791 (16.5)***
18	392 (36.9)***	379 (40.0)***	379 (32.2)***	407 (31.5)***	851 (32.3)***
19	304 (31.3)***	290 (35.0)***	334 (40.6)***	374 (43.0)***	785 (40.0)***
Residence					
Rural	1329 (87.7)***	1301 (86.1)***	1594 (86.0)*	1425 (72.84)	3230 (73.8)***
Urban	277 (12.3)***	313 (13.9)***	342 (14.0)*	132 (27.2)	1034 (26.2)***
Education level					
No education	266 (18.7)***	148 (17.2)***	67 (7)***	112 (7)***	76 (2.5)***
Primary	1080 (74.2)***	1067 (69.7)***	1292 (74.7)***	1262 (70)***	2759 (75.0)***
Secondary	260 (7.1)***	389 (12.8)***	551 (18.0)***	623 (22.2)***	1351 (21.7)***
Higher	-	10 (0.3)***	26 (0.3)***	29 (0.8)***	78 (0.8)***
Contraceptive use					
No	1490 (91.3)	1447 (85.7)**	1811 (87.6)***	1892 (85.6)***	3837 (77.2)***
Yes	116 (8.7)	168 (14.4)**	125 (12.4)***	134 (14.4)***	427 (22.8)***
Observations (N)	1606	1614	1936	2026	4264

Source: UDHS data, 1995-2016

Except for the use of contraceptives in 1995 and residence in 2011, all the variables were found to present significant distributions of adolescents by childbearing. Overall, adolescents that are currently married, above 18 years of age, lived in rural areas, had attained primary level education, and were not using any contraceptive presented the highest distributions (over 30% across the variables) of having started childbearing through the decades, 1995-2016.

2.4.3. Association Between Demographic and Socioeconomic Factors and Having Started Childbearing Among Adolescents

Here, we modeled the probability of having started childbearing among adolescents of ages 15-19 and controlled the association by their current marital status, area of residence, education level, and contraceptive use. The analysis indicated that being currently or formerly married and age were the most important predictors of having started childbearing among adolescents throughout the analytical period while contraceptive use showed no relevance before 2006. Except for 1995, residence did not reveal any other significant associations with having started childbearing among adolescents.

Table 2.3 Relationship between selected demographic and socioeconomic variables and childbearing among adolescents (1995-2016)

Variable	1995	2000/1	2006	2011	2016
Marital Status					
Never married®					
Currently married	27.124***	43.890***	46.346***	42.988***	31.027***
Formerly married	54.264***	40.461***	78.908***	62.331***	45.287***
Age					
15®					
16	2.666*	2.840*	3.817*	2.828***	1.903*
17	7.792***	3.434*	6.780***	4.628***	3.530***
18	13.360***	9.935***	14.598***	7.325***	7.120***
19	17.575***	5.198***	27.401***	13.290***	9.559***
Residence					
Rural®					
Urban	0.625*	1.030	0.814	1.220	0.778
Education level					
No education®					
Primary	1.738*	0.943	1.505	2.040*	1.322
Secondary	0.935	0.563	0.858	1.653	0.690
Higher	-	0.070**	0.233	1.108	0.207**
Contraceptive use					
No®					
Yes	0.758	1.744	1.958*	1.973*	2.591***

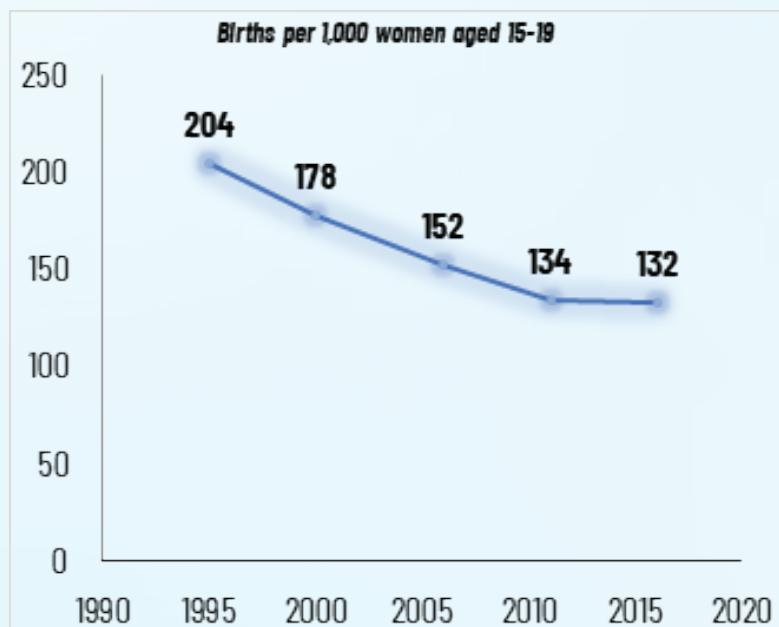
Source: UDHS data, 1995-2016; ®-Reference Category; *p<0.05; **p<0.01; ***p<0.001

Across the years, adolescents who were currently or formerly married were over 26 and 39 times more likely to have started childbearing compared to their counterparts who had never been married. For age, it is revealed that throughout the analytical period, adolescents aged 16, 17, 18, and 19 were more than 90%, 2, 6, and 4 times respectively more likely to have started childbearing than their 15-year-old counterparts. It is also observed that on average, 18- and 19-year-olds exhibited the highest odds of having started childbearing across the years. Using contraceptives started showing significant associations in 2006. However, it is indicated that adolescents using contraceptives are more likely to have started childbearing than those who do not use them. For instance, in 2016 when the strength of the relationship was most significant, those using contraceptives were more than 1.5 times more likely to have started childbearing compared to those who do not use contraceptives.

2.5. Discussion

The number of births per 1000 adolescent girls has declined from 204 in 1995 to 132 in 2016 (Figure 2.1). Given that births are outcomes of pregnancies that are carried to term after mothers have been exposed to sexual activity without using contraceptives or after contraceptive failure (Trussell 2009), the decline in adolescent fertility may be explained in four ways (Mbabazi et al. 2021; Odimegwu and Mwananzi 2016; Opoku-Mensah and Agbekporu 2015; Rutaremwa 2013; Yakubu and Salisu 2018). Firstly, there could be a possibility of reduced exposure to sexual activity among adolescent girls. Secondly, for those who continue to be sexually active, using a contraceptive would significantly reduce the risk of becoming pregnant and consequently a reduction in births. Thirdly, early marriages expose girls to higher frequencies of sexual activity which increases the risks of getting pregnant and hence high fertility among adolescents. Therefore, delayed entry into marriage would negatively impact adolescent fertility (Mbabazi et al. 2021; Rutaremwa 2013). Last but not the least, strategies to keep adolescents in school through tertiary levels not only protect them from early/forced marriages (Mbabazi et al. 2021) but also reduces their exposure to sexual engagements as well as improve their knowledge, accessibility, and use of contraceptives which helps them to avoid pregnancies thus reducing fertility.

Figure 2.1 Adolescent ASFRs 1995-2016

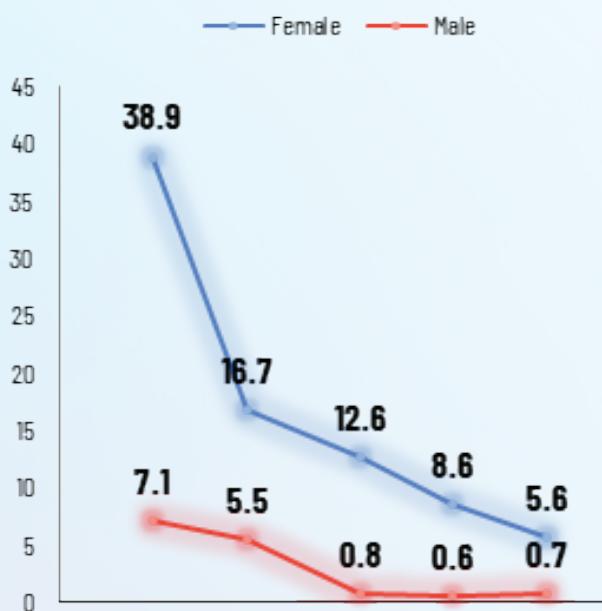


However, most adolescents, 15-19 are not yet in tertiary education so they can't achieve that (like access or knowledge), therefore, education among adolescents who have already started sexual engagement, may not necessarily avoid them from getting pregnant.

Over the past 25 years, the proportion of adolescents in marriage or those who live with their partners as married has consistently and significantly declined (Figure 2.2). The decline in the proportion of girls forced into marriage or marrying earlier is a strong factor in reducing the possibility of girls getting pregnant in their early years (Ochen et al. 2019; Yakubu and Salisu 2018). Another intriguing reason is the declining proportion of boys getting married albeit smaller than that of girls at the onset (Figure 2.2). The possibility of an adolescent boy being in a marriage with a fellow adolescent girl is higher than being married to an adult woman. This indicates how important the decline in the proportion of married boys is to the decline of fertility among adolescent girls as a reduction in their married proportion predicts a vital reduction in the share of would-be married girls.

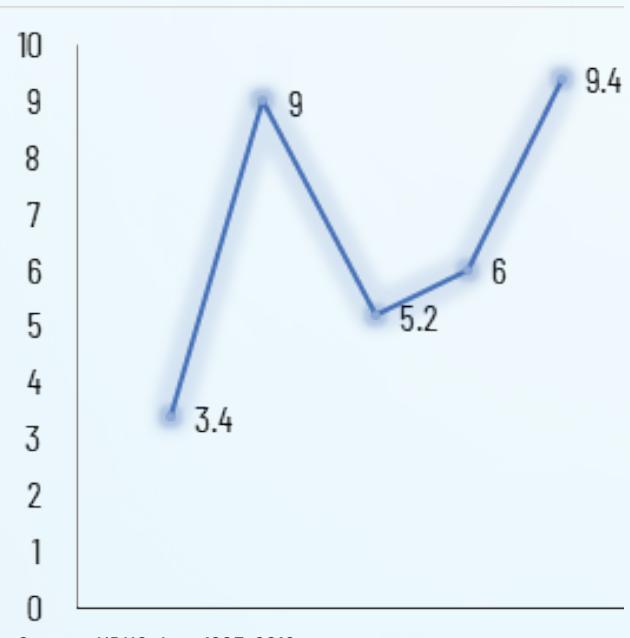
On the other hand, the use of contraceptives reported by female adolescents has fluctuated over the years and the number of those who use them remains quite low. We, therefore, argue that despite the decline observed in adolescent fertility, the use of contraceptives may not have played a tremendous role. However, this does not imply that contraceptives are not able to negatively impact adolescent fertility, but, adolescents are likely to have challenges of access which may hinder their need for utilization (Ivanova et al. 2019; Sserwanja, Musaba, and Mukunya 2021).

Figure 2.2 Trends of married adolescents



Source: UDHS data 1995-2016

Figure 2.3 Female adolescents' contraceptive use



Source: UDHS data 1995-2016

Even though Uganda should be aiming at maintaining the best practices in the past decades including strict action against those who marry young girls as well as those who force girls into marriage, maintaining girls in school through the higher levels, which informs the decline in adolescent fertility, we should be cognizant of the following facts. Firstly, the adolescent fertility rate almost stalled between 2011 and 2016 (Figure 2.3). Secondly, teenage pregnancies, which are a key factor in determining adolescent fertility have instead stalled since 2006 (Figure 2.3). And thirdly, the country's sexual and reproductive health challenges were intensified by the COVID-19 pandemic, especially between 2020 and 2021 (Bukuluki et al. 2022; Burt et al. 2021) where, because of the longevity of school closures, many adolescent girls were forced into marriage, got more exposed to sexual activity, several of them got pregnant, and others completely dropped out of schools yet access to contraceptives is still a challenge to adolescents. In 2021 alone, daily adolescent pregnancies rose to a record high of 1,052 per day from 985 in 2020 which had dropped from 994 in 2019 (UNFPA Uganda 2022).

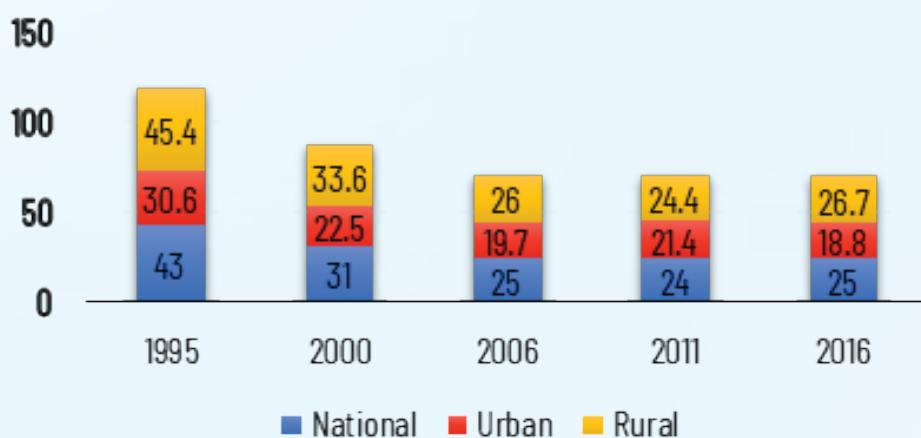
For these reasons, should Uganda be worried about a change from stalled to increasing numbers of adolescents who have started childbearing and a possible reversal from a declining to an increasing adolescent fertility rate? To answer this question, the study draws on data from 1995 through the 2016 Uganda Demographic and Health Surveys to predict

the association between selected demographic and socioeconomic characteristics of adolescents and having started childbearing (Figure 2.4). From the results (Figure 2.4), it is reinforced that being married/in a union or formerly being married/in a union increases the chances of starting childbearing a finding that is grounded by similar research conducted in Uganda (Ochen et al. 2019; Wasswa et al. 2021). Given the pandemic effects where school closures caused girls to get into marriage or actively engage in sex (Bukuluki et al. 2020; Kons et al. 2022; Nakiyangi et al. 2022), then Uganda has a point to worry that its formerly declining fertility rate may continue to stall like it has been for the last 5 years or reverse the declining trend.

On one hand, it would be argued that the use of contraceptives would lure a downward trend in adolescent fertility rate (Alemayehu, Haider, and Habte 2010; Diez et al. 2020; Harrison et al. 2009; Lindberg, Santelli, and Desai 2016; Sánchez-Páez and Ortega 2018), however, evidence from the past 15 years (Figure 2.4) indicates that the use of contraceptives is associated with having started childbearing. This implies that adolescents could be triggered to start using contraceptives after their first births to ensure they do not get pregnant again right away (Kershaw et al. 2003; Templeman et al. 2000), however, they may not use contraceptives to avoid getting pregnant in the first place. This could be so because adolescents prefer not to use contraceptives especially condoms (Bauman and Berman 2005) yet they are the most accessible and if they do, they use short-term birth control measures like emergency pills, withdrawal and safe days, or incorrectly use condoms. Such preferences place adolescents at risk of getting pregnant because of contraceptive failure (Breheny and Stephens 2004).

On the other hand, even if contraceptives were playing a key role among today's adolescents, reliable access to contraceptives is a problem (Batwala et al. 2006) and there are several myths and misconceptions around their usage which hinder adolescents from using them (East et al. 2007; Shah, Solanki, and Mehta 2011). Others that have emerged beyond the barriers of access and the misconceptions around the use of contraceptives, may instead use them irregularly (Gilliam, Warden, and Tapia 2004) which puts them at high risk of unintended pregnancies.

Figure 2.4 Trends of adolescents who have started childbearing



Source: UDHS data 1995-2016

2.6. Conclusions

It is therefore, clear that past strategies to ensure that girls are maintained in schools to prevent them from starting unions or getting married have been important in determining the downward adolescent fertility rate. However, it should be noted that even though schools are effective in ensuring that girls are not married off at an early age, they do not guarantee delays in sexual engagements. Girls have frequently become pregnant while in school which could explain the stalled teenage pregnancies and seemingly stalling adolescent fertility rate in the past decade. This situation indicates that even though schools impact the timing when girls may get married, they may not have full control over their sexual activity even within the schools which calls for further action beyond just maintaining girls in schools.

2.7. Policy Recommendations

It is prudent that the government of Uganda and its development partners expedite an effective implementation of the National Sexuality Education Framework across all levels of education in all schools in the country. To achieve this, the following action steps need to be adopted.

- There should be adequate financing for the implementation of the framework.
- Government should ensure the successful coordination of all line ministries for effective and efficient implementation of the framework by establishing a joint monitoring, evaluation, and learning team.
- The framework should be localized by establishing community platforms through which adolescents are identified and trained to implement community peer-to-peer information, education, communication sessions.
- Safe spaces should be created in schools to avail platforms through which young girls can report incidences of sex practices, and obtain contraceptive care, and counseling.

The 2004 National Adolescent Health Policy should be revised, new goals and targets remodeled with an aim of realizing a continued decline of adolescent fertility and ensure full actualization of the policy to include the comprehensive SRH services. Here, sexually active adolescents should be planned for by ensuring that quality and comprehensive access to contraceptives is achieved.

Adolescents should be maintained in schools and strict actions against those who stand as barriers in their way should be enforced in the following ways.

- Government should increase the number of primary and secondary schools found in each ward/parish to ensure that students do not drop out of school because of long distances.
- Quality education should be ensured through proper financing of schools which will improve instructors' performance.
- Early marriage promoters should be convicted, and heavy penalties set to deter the vice in society.
- A program to re-enroll girls back into school after giving birth should be established to ensure that young girls are not married off and prolong the time when they can conceive again.

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3.0. Background

Reducing the fertility rate in a country has positive consequences on economic growth, poverty reduction, and improved health and nutrition outcomes (Tadesse & Heady, 2012).

The fertility rate in Uganda has generally been declining over the years though there was some stagnation between 1995 and 2000/01. The pace of the decline in the fertility is rather slower than what many would have wished as a fertility rate of 5.4 is still very high which is only comparable to Tanzania's 5.2 births.

In 2005, the fertility rates in Uganda, Tanzania, and Rwanda were comparable but since then, Rwanda's fertility rate has since declined to 4.2 and Kenya is the only country in the region with a lower rate of 3.9.

The high fertility rate results in unfavourable age structure that has a large pool of young population (44% under the age of 15 years) that is dependent on the working population. Such a high dependence burden is a barrier for a country to attain a Demographic Dividend. Given the above ground, SUPRE 2022 therefore, prioritized the need for research in areas that identify factors associated with achieving a favorable age structure (fertility and mortality reduction).

There exists a number of past works in Uganda that have alluded to the importance of education of females, contraceptive use and improvement of household wealth as factors that could explain the observed fertility decline in Uganda (Bbaale, 2011; Buyinza & Hisali, 2013; Rutaremwa, Galande, Nviiri, Akiror, & Jhamba, 2015). The studies have however not fully explored all determinants of fertility and also have not been specific in terms of giving recommendations regarding areas that government should invest in so as to reduce further the fertility. This study will thus address this knowledge gap.

3.1. Problem statement

The fertility rates in Uganda have been reducing over the last 15 years. The 2016 UDHS estimated it at 5.4 births per woman. The figure though is a reduction from the previous years, it's still unacceptably high. The high fertility rate has resulted in unfavourable age structure with 42 percent of the population under the age of 14 years. This high proportion of the population outside the working age population (14-64 years) presents a high dependency burden that the country has to deal with. As the country plans to harness the Demographic Dividend, attention has shifted to identifying factors that lead to reduction in fertility (fertility determinants) so as to realize a favourable age structure.

3.2. Study objective

The main objective of the paper is to profile the levels, trends and determinants of fertility in Uganda.

3.2.1. Specific Objectives

The specific objectives include to;

- a) Determine the levels and trend of fertility in Uganda
- b) Determine factors associated with a reduction in fertility rates
- c) Make policy recommendations based on study findings

3.3. Methods

3.3.1. Data source

The study used data from the 2016 Uganda Demographic and Health Survey (UDHS). The Uganda Demographic and Health Survey is a nationally representative survey conducted every 5 years. The survey collects information in such areas as births to women aged 15–49 years, women's characteristics, community characteristics, and household characteristics. In this study, data from women, community and household characteristics was used.

The UDHS data was preferred to other data sources because it has comprehensive coverage of fertility levels of women. The woman recode file was the key data source used in the study.

3.3.2. Measurement of outcome variables

The number of children born to women of reproductive age (15–49 years) was taken as a proxy for fertility. Prior to the analysis of data, the number of children born was grouped into 3 categories; 0-3 children, 4-6 children and seven or more children.

3.3.3. Measurement of other explanatory variables

For the analysis, covariates from the community, household, and individual levels were included on the base of the fertility conceptual framework (Arjun Adlakha, Timothy Fowler and Vera Harris-Bourne (1996)). Community-level variables used in the study included residence (urban/rural) and subregion. The districts were grouped to generate the 15 statistical subregions used by UBOS. They include; Kampala, Buganda South, Buganda North, Busoga, Bukedi, Bugisu, Teso, Karamoja, Lango, Acholi, West Nile, Bunyoro, Tooro, Ankole, and Kigezi.

Household-level variable included was the wealth index. The index was grouped into five groups namely; poorest, poorer, middle, richer, and richest. The groups had codes ranging from 1 for poorest to 5 for richest.

Individual-level variables for women included; age, educational attainment, involvement in decision-making, ever given birth, and access to health services. Age was coded into seven groups: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49. Education attainment was coded as 0 "no education", 1 "primary", 2 "secondary", and 3 "higher". Involvement in decision-making was generated from three variables: Women who were involved in decision-making individually or jointly with their partner regarding spending of their income, their own health care, and household purchases were coded as 1 "involved", otherwise 0 "not involved". The missing cases were given the code 9.

Access to health care was coded as 1 "yes", otherwise 0 "no", depending on whether distance to health facility was reported as a big problem in accessing health care or not.

3.3.4. Statistical analyses

Data for the sample was weighted using the women's individual sample weight to adjust for nonresponse and disproportionate selection. The svy command was used to test for survey design effect. The independent variables were tested for multicollinearity using the pairwise correlation coefficient and only variables with a relationship below 0.5 were included in the analysis (Vatcheva, Lee, McCormick, and Rahbar 2016).

Bivariate analysis was conducted to examine the association between the dependent variable (fertility) and the explanatory variables. Pearson's chi-squared (χ^2) test was used to examine the significant differences between fertility and the explanatory variables. Statistical significance level using p-values was set at less than five percent ($p < 0.05$). Multivariate logistic regression were used to examine the relationship between fertility level and the determinant variables.

Incidence rates and 95% confidence interval are presented in the results table 3.1. All analysis was done using Stata version 17.

3.3.5. Ethical considerations

We sought permission to use the UDHS dataset from The DHS Program website <https://www.dhsprogram.com/data/available-datasets.cfm>. The ICF IRB reviewed and approved the 2016 UDHS data. The ORC MACRO, ICF Macro, and ICF IRBs complied with the United States Department of Health and Human Services regulations for the protection of human research subjects (45 CFR 46). Further information on the survey can be found in the 2016 UDHS report (Uganda Bureau of Statistics – UBOS and ICF 2018).

3.3.6. Study limitations

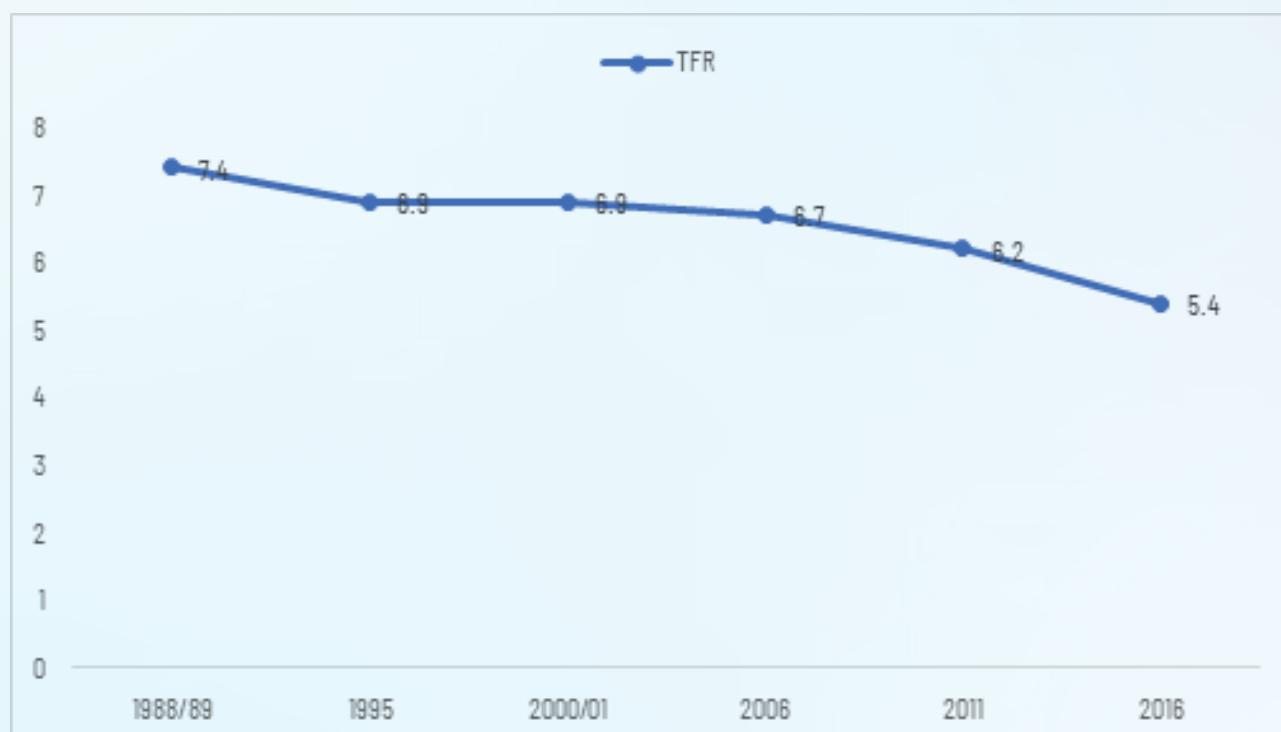
This study data is from a cross-sectional study and therefore it is not possible to assess causal relationships, but only associations between the variables. The study only considered fertility among women of reproductive age (15-49 years) hence fertility outside the age group is not part of the study.

3.4. Results

3.4.1. Total Fertility Trends

Figure 3.1 shows the trend in fertility over the last six survey years. The results show that fertility rates have declined over the years from 7.4 births in 1988/89 to 5.4 births in 2016. This represents twenty-seven percentage point reduction.

Figure 3.1: Fertility trends over the years



3.4.2. Descriptive and bivariate analyses

Table 3.1 shows results from analysis of fertility and selected characteristics of women. The results generally show that all the predictors were significantly associated with the outcome variable in the bivariate analysis hence their inclusion in the multivariate analysis model.

The main variable in the study (fertility) was measured using the number of children ever born. The findings on fertility among women using contraceptives was rather surprising as it was observed that women not using contraceptive were less likely to have seven or more children ever born compared to those using contraceptives (14% and 18% respectively). The disaggregation by type of contraceptive shows that fifty eight percent of women using folkloric method had seven or more children ever born, followed by traditional method (19%) and modern method (18%) in that order.

Education of the woman was significantly associated with the number of children ever born. Only 2 percent of women whose level of education is above secondary had seven or more children compared to 43 percent of women without education.

Considering the place of residence, seven in every ten women residing in urban areas had less than four children ever born compared to the six in every ten in the rural areas. On the other hand, close to one fifth of women residing in the rural areas had seven or more children. It can be concluded that fertility in the country is mainly driven by the fertility levels of the rural areas.

Involvement of women in decision making regarding the number of birth and decisions on her healthcare is a critical aspect of empowerment. One of the surprising findings is that only 8 percent of women not involved in household decision making reported seven or more children compared to 21 percent for those who were involved.

Difficulty in accessing healthcare limits the chance of delivery in the hands of a qualified healthcare provider. Women were asked in the survey to report whether transport to a health facility was a very big problem for them. The findings show that more women who reported transport being a big problem have seven or more children ever born compared to those for whom it is not a big problem (20% and 12% respectively). The disaggregation by wealth index shows that among women in the richest wealth quintile, only 5 percent had seven or more children compared to 21 percent for those in the poorest category.

Table 3.1: Bivariate analysis showing the number of births by background characteristics

	Number of children ever born				
Variable	Category	1-3	4-6	7+	x2/ Significance
Contraceptive use	No	67.3	19.1	13.7	$\chi^2=484.0; p=0.000$
	Yes	50.5	31.2	18.2	
Contraceptive Method	No Method	67.3	19.1	13.7	
	Folkloric Method	16.7	25.6	57.7	$\chi^2=543.5; p=0.000$
	Traditional Method	52.6	28.3	19.1	
	Modern Method	50.6	31.6	17.8	
	No Education	24.3	32.8	42.9	
Educational attainment	Primary	57.5	25.2	17.3	$\chi^2=2617.5; p=0.000$
	Secondary	80.7	16.1	3.3	
	Higher	84.1	14.2	1.7	
Residence	Urban	73.2	20.1	6.7	
	Rural	58.2	23.7	18.1	$\chi^2=464.1; p=0.000$
Employment status	No	78.3	13.6	8.1	$\chi^2=753.6; p=0.000$
	Yes	56.3	26.1	17.6	
Involvement in decision making	No	77.7	14	8.4	$\chi^2=1660.1; p=0.000$
	Yes	48.6	30.5	20.9	
Difficulty in accessing healthcare	No	66.5	21.3	12.3	$\chi^2=280.2; p=0.000$
	Yes	55.1	25.2	19.7	
Marital status	Never Married	98.6	1	0.4	
	Married	49.5	30.2	20.4	$\chi^2=3637.9; p=0.000$
	Formerly Married	49.8	31	19.2	
Wealth Index	Poorest	52.7	26.4	20.9	
	Poorer	56.6	24.8	18.6	$\chi^2=778.2; p=0.000$
	Middle	56.9	23.2	19.9	
	Richer	62.3	22.6	15.1	
	Richest	76.6	18.5	4.9	

3.4.3. Determinants of fertility

a) Testing the association between fertility and independent variables

The Poisson regression model was tested for goodness of fit. The results show that there was a good fit given that goodness of fit chi square test was not statistically significant (Cameron & Trivedi, 2009).

The results in Table 3.2 show a surprisingly positive relationship between contraceptives and births. It was seen that women who use contraceptives had increased incidence of having children ($IRR=1.116$, $p=0.000$). Also, the test according to the different methods of contraception shows that, women who use folkloric and modern methods had higher incidence for children compared to those using traditional methods ($IRR=1.127$, $p=0.014$ and $IRR=1.000$, $p=0.000$).

The results show an association between places of residence and number of children born at 1 percent level of significance. The incidence of having an additional child was higher for women residing in rural areas ($IRR=1.064$, $p=0.000$) compared to the urban areas which is consistent with the UDHS 2016 findings that show that more births are in rural areas compared with the urban areas.

There was a negative relationship between a woman's education and number of children born. The incidence for children reduced with increase in the level of a woman's education. For instance, women educated to secondary level had 24 percent reduced risk for additional children ($IRR=0.761$, $p=0.000$) and the risk further reduced to 45 percent for women educated to higher levels ($IRR=0.552$, $p=0.000$).

The level of household income is known to have inverse relationship with the number of children ever-born by women in that household (Asamoah et al., 2013; Buyinza & Hisali, 2013; Shapiro & Gebreselassie, 2013). The findings in this work do have a similar pattern. Women from the richest households had reduced incidence for additional children ($IRR=0.801$, $p=0.000$) compared with those from the poorest households.

The association between the number of children ever born and difficulty women have to reach health facilities was explored. The results show that women who reported that distance to health facility was a very big problem had higher incidence for children ($IRR=1.035$, $p=0.000$) compared with those that reported otherwise.

Table 3.2: Poisson regression model predicting the incidence ratio of having children

		2016 UDHS		
Variable	Category	IRR	Standard error	Sign (p)
Contraceptive use	No	1	-	-
	Yes	1.116	0.009	0.000
Contraceptive method	No contraceptive use	1	-	-
	Folkloric method	1.127	0.055	0.014
	Traditional method	0.95	0.018	0.006
Residence	Modern method	1	-	-
	Urban	1	-	-
	Rural	1.064	0.013	0.000
Education level	No education	1	-	-
	Primary	0.946	0.01	0.000
	Secondary	0.761	0.011	0.000
	Higher	0.552	0.013	0.000
Wealth Index	Poorest	1	-	-
	Poorer	0.946	0.011	0.000
	Middle	0.931	0.011	0.000
	Richer	0.89	0.012	0.000
	Richest	0.801	0.014	0.000
Transport difficulty to reach a health facility	No	1	-	-
	Yes	1.035	0.008	0.000
Model constant		0.144	0.007	0.000
Summary model statistics		Number of women =18,506; Pseudo R ² =44.0%;		
		Wald-chi-square=32818.14, p=0.000		
		Pearson Goodness-of-fit =13516 with p=1.000 (implying a well specified model).		

Source: Authors computations

3.5. Discussion

This study shows that fertility levels have dropped from 7.4 births in 1988/9 to 5.4 births in 2016. Despite the drop, the fertility level of 5.4 births in Uganda is the highest in East Africa and this could explain the population structure that is mainly young (44% below the age of 15 years).

The factors that are associated with reduction in fertility in the paper include; education of women, place of residence, difficulty in access to healthcare, wealth status of the household and subregion where the household is.

3.5.1. Fertility determinants

The education of women to higher levels is associated with reduced fertility level. In the bivariate analysis, only 3% of women whose level of education is above secondary had 7 or more children and the number was higher for those with no education (43%). The multivariate analysis shows reduced incidence for more children for women who had attained some school (45% reduced incidence for children for women with education above secondary). The findings on the relationship between a woman's education and number of children is consistent with other literature (Bbaale, 2011; Buyinza & Hisali, 2013; Rutaremwa, Galande, Nviiri, Akiror, & Jhamba, 2015; Asamoah et al., 2013; Burger et al., 2012; Chaudhuri, 2012; Gebremedhin & Betre, 2009; Nag & Singhal, 2013).

Similar to findings elsewhere, women in the poorest households had more births compared to those from wealthier households (John Caldwell & Pat Caldwell, 1987). This can be attributed to inability of women in poorer households to access services like family planning. Further still, the need to work and earn becomes an opportunity cost for more children for women in rich households.

Women that reside in urban areas had reduced incidence for children compared to those from rural areas. This could be explained by the fact that women in urban areas have access to education, information on getting the number of children that one is able to manage and they also have access to services like family planning.

Women that reported accessing healthcare as not very difficult for them had reduced incidence for children. This finding is consistent with the results of the bivariate analysis where by 12% of women who find it easy to access healthcare had 7 or more births compared to 20% for whom access to healthcare was very difficult.

Subregional differences were noted in the findings. There was reduced incidence for children in Kampala, West Nile, Ankole, Kigezi, and Lango compared to other regions.

3.6. Conclusion

The results suggest that improving education of women beyond secondary level is critical to reduce fertility levels in the country. Also, improving household income and access to health care should be prioritized in order to reduce the number of births.

3.7. Policy recommendations

Government should do investments in improving household wealth. There is need for clear criteria for identification and prioritization of vulnerable households to benefit from government programmes like the PDM that targets to improve household income. In addition, Social security programs such SAGE should be all inclusive as the program currently targets those 80+ years yet our working age population stops at 64. The implication for the age cutoff is that persons between the ages 65 and 78 loose out on such benefits. Also, monitoring the implementation of the programs to improve welfare of the population is key.

Investment in tertiary education is needed especially for women. This can be achieved by increasing the number of female students admitted for the different courses on government scheme.

More targeted investment in healthcare such as subsidizing healthcare cost for the population is needed. There is also need to diversify the services provided in the health centre II that are closer to the population. This will address the issue of access to healthcare.

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4.0. Introduction

Fifty-six percent of women aged 15-49 are using modern contraceptives worldwide. Africa has the least Modern Contraceptive Use (MCU) at 32% compared to other continents whose rate ranges from 63% for North America to 60 percent for Europe. Modern Contraceptive Use in Sub-Saharan Africa stands at 28% (PRB, 2018).

Uganda is among those countries in Sub-Saharan Africa with low utilization of modern contraception (35%) compared to the neighbouring countries like Kenya and Rwanda whose modern contraception is 61% and 48% respectively (PRB, 2017). This has contributed to a high fertility rate of 5.4 children per woman and as a result contributed to a high population growth rate of 3.0% (Ministry of Health, 2014). Although there has been an increase in modern contraceptive use among Ugandan women from 18% in 2006 to 35% in 2016, the use is still low to cause significant reductions in fertility levels and if the trend remains the country is unlikely to attain the set objectives in the National Development Plan III of reducing the Total Fertility rate to 4.5 children per woman by 2025 and attaining the demographic transition by 2040 (NPA, 2020).

There are regional disparities in contraceptive use in Uganda, these exist by age, marital status, education socio-economic and rural-urban geographic location (Ministry of Health, 2014). Among married women, the use of modern contraception is higher among those in urban areas (41%) than among those in rural areas (33%). Modern Contraceptive Use is also higher among women with secondary education and above (43 %) and lower among women with no and primary education (23%). Regionally, the Karamoja region has the lowest Modern Contraceptive Use at 6.5%, followed by West Nile at 19%, Busoga at 29%. The highest modern contraception exists in the regions of Kigezi and Bugisu with 43% each (UBOS, 2018).

Kigezi is a mountainous region while Karamoja is established on a large plateau between the mountains of Sudan and the eastern rift escarpment of Kenya. Both regions are largely remote which makes them hard-to-reach regions. The remoteness of these regions negatively affects service delivery due to poor road infrastructure, poor communication networks, and delays in the transportation of essential supplies and, commodities. Despite these challenges, Modern Contraceptive Use in Kigezi is high while that of Karamoja is very low.

Uganda had anticipated attaining the family planning 2020 targets of 50 percent modern Contraceptive Prevalence Rate and 10 percent (unmet need for family planning) respectively (Ministry of Health, 2014) but did not and, is still far from achieving these targets. Over the years a lot of money has been allocated to procure family planning commodities and disseminate messages to increase the uptake of modern contraceptives in various regions of Uganda more so in the Karamoja region, modern Contraceptive Prevalence Rate has remained very low in Karamoja at 6.5 percent for over a decade compared to other regions like Kigezi whose rate is at 43%. Therefore, identifying and addressing key factors contributing to this variation will go a long way in bridging this gap by increasing family planning uptake in these regions and Uganda as a whole.

4.1. Problem statement

Modern Contraceptive Use in Uganda varies with the regions, with the two regions of Kigezi and Karamoja having the largest variation in use by 37 percentage points. These two regions are both located at the extreme ends of Uganda, Kigezi region is situated in the extreme southwest of Uganda while Karamoja region is in the extreme northeast of Uganda. Although Karamoja region is regarded as a hard-to-reach region, Kigezi on the other hand is a mountainous region that hinder service delivery in both regions. Despite efforts by the government to increase development interventions for the people of Karamoja and despite a heavy presence of family planning partners in Karamoja compared to Kigezi, the modern Contraceptive Prevalence Rate in the Karamoja region has remained very low at 6.5% over years.

Similar studies like leaving no one behind in Karamoja (United Nations Population Fund, 2018) do not provide factors to explain this variability in modern contraceptive use between the two regions. Other studies have largely centered on generalized factors contributing to contraceptive use among women in Uganda (Andi, 2014, (Namasivayam, Lovell, Namutamba, & Schluter, 2020). By contrast, just a few studies have established individual determinants of contraceptive use in Eastern and Northern regions but, there is limited study on regional variations in the determinants of Modern Contraceptive Use in Uganda. It was, therefore, important to establish factors contributing to this variation in the two regions to inform family planning programming in Uganda.

4.2. The main objective of the study

The main objective of the study was to establish differences in determinants of Modern Contraceptive Use among women aged 15-49 in Karamoja and Kigezi regions to inform family planning programming in Uganda.

4.2.1. Specific objectives

The specific objectives of the study were:

- To ascertain and compare demographic determinants of Modern Contraceptive Use in Karamoja and Kigezi regions.
- To establish and compare socio-economic determinants of Modern Contraceptive Use in Karamoja and Kigezi regions.
- To compare behavioral determinants of Modern Contraceptive Use in the two regions of Karamoja and Kigezi.

4.3. Methodology

4.3.1. Data source

Secondary data from the 2016 Uganda Demographic and Health Survey was used where the country was grouped into 15 regions for the UDHS and these are; South Central (Central 1), North Central (Central 2), Kampala, Busoga, Bukedi, Bugisu (Elgon), Teso, Karamoja, Lango, Acholi, West Nile, Bunyoro, Tooro, Kigezi and Ankole as shown in Figure 4.1.

This study was carried out on a sample of all women aged 15-49 in Kigezi region (950) and all women aged 15-49 in Karamoja region (737), which data was extracted, cleaned, and weighted to ensure representativeness and to control for non-responsiveness across the regions, this generated a weighted sample size of 724 women for Kigezi and 363 women for Karamoja. The total weighted sample size of 1087 women was therefore utilized in this study. The researcher utilized the UDHS data set because it was cost-effective and wanted to answer a specific research question that had been identified in the survey.

Figure 4.1: A map showing study regions highlighted in red



4.3.2. Variables and measures

Modern contraceptive methods are effective methods of controlling the fertility of a woman. The following modern methods were considered in this study; pills (single and combined hormones), injectables, Intra-Uterine Device (IUD), condoms, implants, sterilization, lactational amenorrhea, standard days method, and emergency contraceptive pills. Modern Contraceptive Use which is the outcome variable in this study was recoded to take a binary form, use, and non-use. The variable was defined using women's responses to two survey questions: (1) Are you or your husband/partner currently doing something or using any method to delay or avoid getting pregnant? and (2) Which family planning method are you using? All women who were using any modern method of family planning were coded 1, while those who were using traditional methods were merged with those not using and coded 0. Traditional methods are rhythm and withdrawal.

The independent variables in this study are age, the number of living children, the ideal number of children, wealth status, woman and husband/partner's education, work status, exposure to family planning messages, place of residence, visited a health facility in the last 12 months preceding the survey, religion, marital status, age at first cohabitation and age at first birth. Numerical variables like the number of living children, age at first birth, and cohabitation were grouped to form dummy categories while some categorical variables were recoded for ease of analysis. For example, education level was recoded into 3 groups where secondary and higher education were combined and formed a secondary+ category and coded 2, primary education coded 1, and no education coded 0.

4.3.3. Data analysis

Data analysis was done using STATA, a statistical software. This focused on all women aged 15-49 years in the Karamoja and Kigezi regions of Uganda. The bivariate analysis generated associations between the dependent and independent variables and, Pearson chi-square was used to test the associations. At the multivariate level of analysis, logistic regression models were fitted to test the effect of the explanatory variables on Modern Contraceptive use in the two study regions. Before fitting the final models, 2 models were fitted, the first model included all variables that had been considered at bivariate analysis, and using the elimination method the second model included those significant at bivariate analysis. The odds ratios of the final models and the 95% confidence intervals were used to measure the association between the predictors and the outcome variable. A p-value of less or equal to 0.05 was considered statistically significant.

The models were in the form: $\ln\left(\frac{P_i}{1-P_i}\right) = a + b_1X_1 + \dots + b_kX_k$

Where P_i is the probability of using modern contraceptives, $b_1\dots b_k$ are coefficients, $X_1\dots X_k$ are the selected independent variables.

4.3.4. Limitations

Like any other cross-sectional study, this study could not determine the causal relationship between Modern Contraceptive Use and the predictors because the outcome and explanatory variables were measured at the same time, which made it difficult to determine whether these variables preceded or followed the outcome. Additionally, the researcher would have liked to explore cultural variations in the two study regions in relation to modern contraception but cultural factors like social organization, cultural norms, and practices were not available in the dataset. There was also a challenge with data so some confidence intervals were quite high.

4.4. Findings

4.4.1. Background characteristics of the respondents

Annex 1 shows the percentage distribution of a weighted sample of 1,087 women aged 15-49 years by selected background characteristics, 363 from Karamoja and 724 from Kigezi. Results indicate that majority of women in both regions were below the age of 30 years, 60% for Karamoja and 56% for Kigezi. Additionally, the majority of women in both regions were married; 73% and 62% for Karamoja and Kigezi, respectively. Whereas most women had four children and below in both regions, the proportion was much higher in Kigezi (81%) compared to 70% in Karamoja, and the majority of these women in both regions lived in rural areas, 80% and 83% for Karamoja and Kigezi respectively.

Findings in Annex 1 further show that majority of women in Karamoja had no education (66%) compared to only 12% of women with no education in Kigezi region. The proportion of women with primary education was 29% for Karamoja and 60% for Kigezi, while only 5% of women in Karamoja had secondary education and above, in Kigezi region, 28% of women had studied up to secondary level and beyond.

As regards work status, the majority of women in both regions were working, 70% and 73% for Karamoja and Kigezi, respectively. Results also indicate that whereas the majority of women in Karamoja (80%) were Catholic and only 9% were Anglicans in the same region, in Kigezi the proportion of Catholic and Anglican women was equal (45%) for each, while other religions counted for only 8% and 10% in Karamoja and Kigezi respectively. Only 3% of women in Karamoja had no religion, whereas in Kigezi the percentage of women with no religion was negligible.

Regarding the wealth status of women in the two study regions, the results of the study indicated in Figure 4.2 reveal that whereas only 20% of women in Kigezi are poor, most women in Karamoja are poor (90%). A relatively big proportion (80%) of women in Kigezi are in the middle and rich category compared to only 10% in the same category in the Karamoja region.

Figure 4.2: Percentage comparison of wealth status of women in the study regions

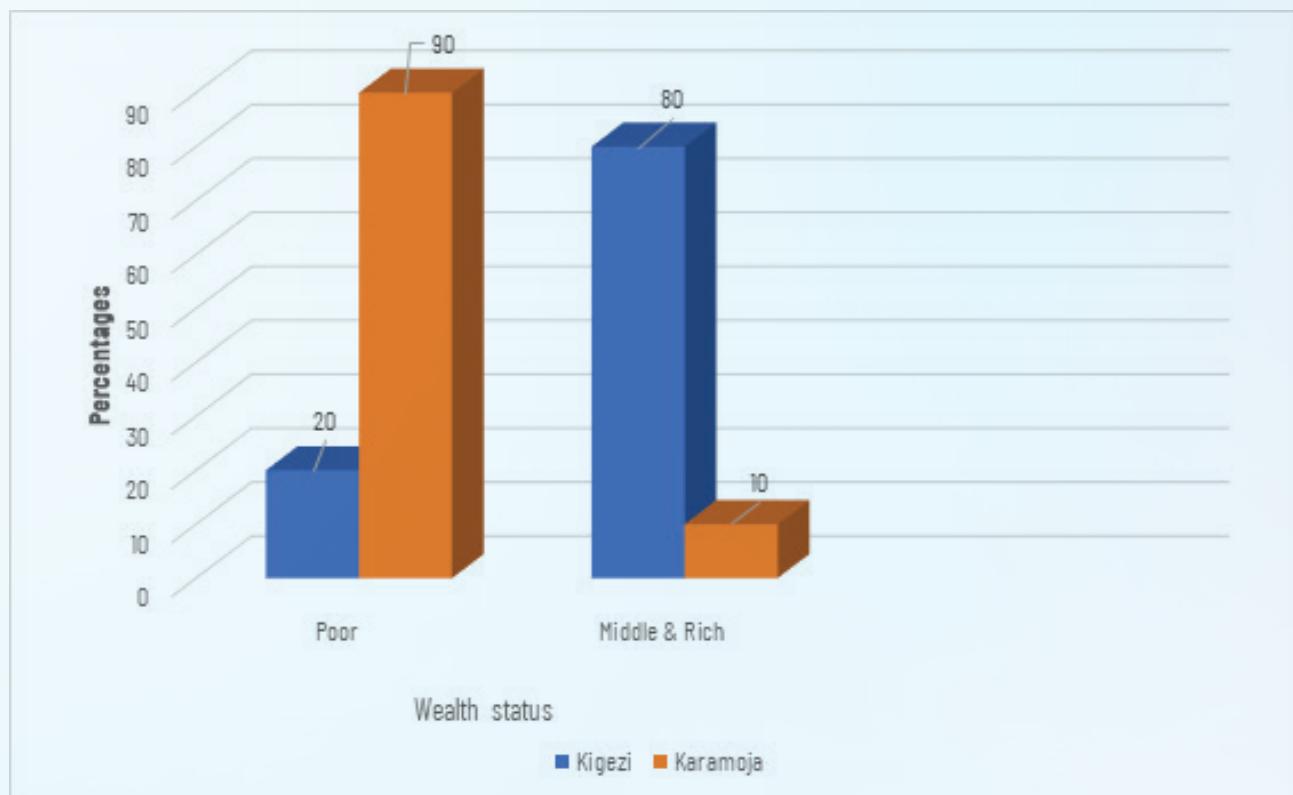
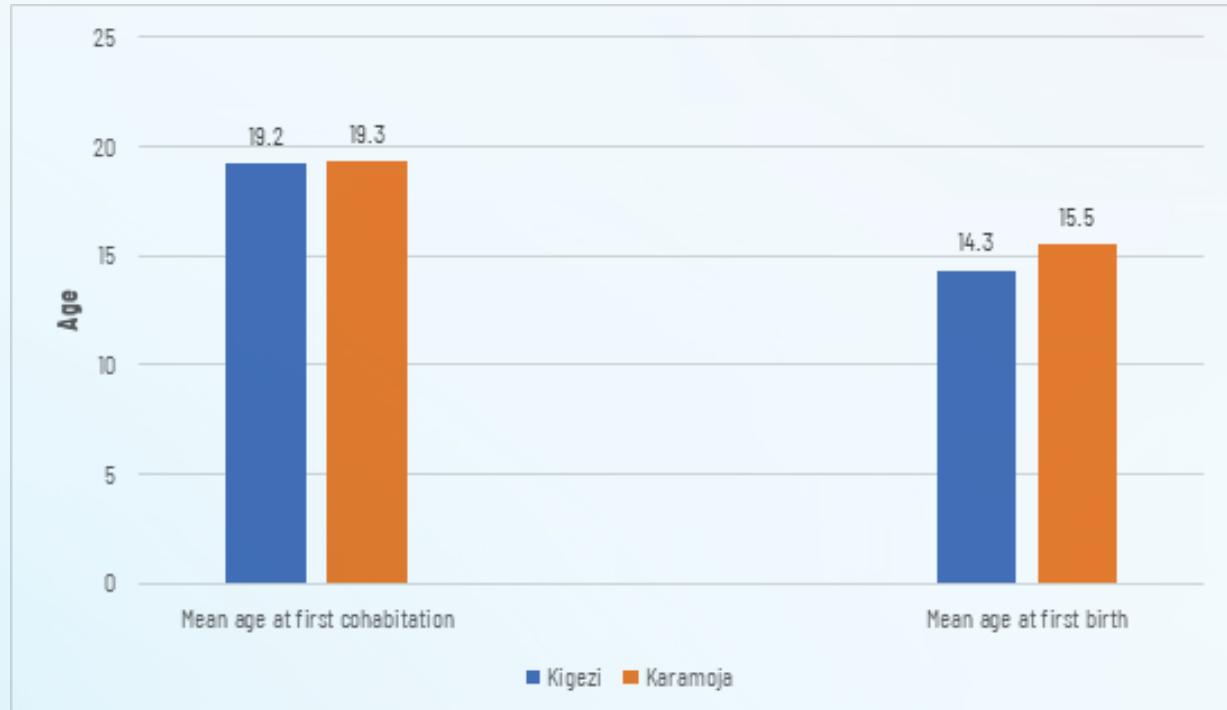


Figure 4.3 indicates that the mean age at first birth in Kigezi (14.3 years) was much lower than that in Karamoja region (15.5), while the mean age at first cohabitation was almost similar for both regions, 19.2 years and 19.3 years for Kigezi and Karamoja respectively.

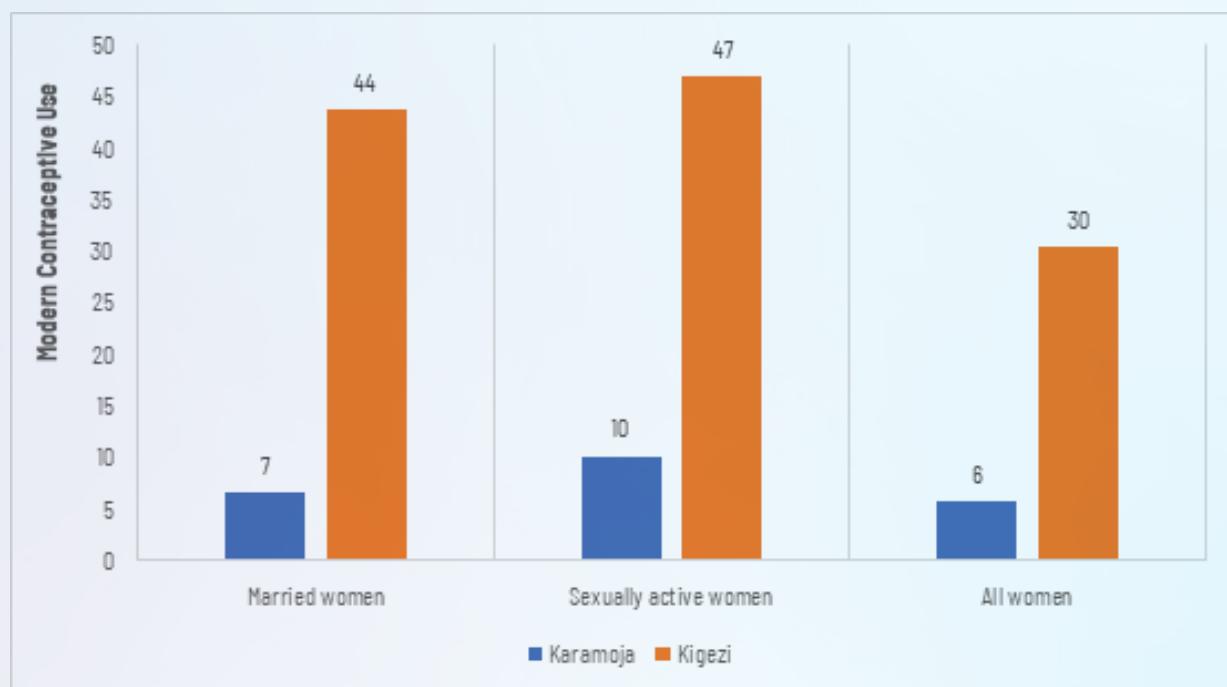
Figure 4.3: Medium age at first cohabitation and first birth in the two regions



4.4.2. Utilization of Modern Contraception in the study regions

Figure 4.4 shows that only 7% of married women in Karamoja region were using modern contraceptives compared to 44% of married women in Kigezi. Results further revealed that 10% of sexually active women in Karamoja were utilizing modern contraception compared to 47% of sexually active women in Kigezi while 6% of all women aged 15-49 in Karamoja region were using modern contraceptives compared to 30% of all women in Kigezi region.

Figure 4.4: Modern Contraceptive Use in Karamoja and Kigezi regions



4.4.3. Association between Modern Contraceptive Use and background factors

Annex 1 presents the cross tabulation of the associations between the explanatory variables and Modern Contraceptive Use in the regions of Karamoja and Kigezi.

Results of the bivariate level analysis revealed some similarities in the two study regions as regards the association between Modern Contraceptive Use and selected independent variables. In both regions Modern Contraceptive Use was significantly associated with marital status ($p=0.011$, $p=0.000$), wealth status ($p=0.001$, $p=0.008$), exposure to family planning messages ($p=0.001$, $p=0.014$), and, the husband's/partner's education level ($p=0.010$, $p=0.000$) for Karamoja and Kigezi respectively.

Although marital status was significant in both regions, the proportion of married women who were using modern contraceptives in Karamoja was far less (6.5%) compared to that of Kigezi (44%). Results further revealed that only 4% of the poor women in Karamoja were using modern contraceptives compared to 32% in Kigezi, 17% of women in the middle category of wealth in Karamoja and 23% of those in Kigezi were utilizing modern contraception and, only 18% of the rich women in Karamoja were using modern contraceptives compared to 35% of those in Kigezi region.

Annex 1 further shows that only 8% of women in Karamoja who were exposed to family planning messages were utilizing family planning compared to 32% of those in Kigezi. Although the husband/partner's level of education was significant in both regions the proportion of those women who were using modern contraceptives and whose husbands had secondary education and above in Karamoja was only 15% compared to 54% for those in the Kigezi region.

Additionally, in Karamoja region Modern Contraceptive Use was significantly associated with age at first birth ($p=0.034$), age at first cohabitation ($p=0.002$), the ideal number of children ($p=0.001$), and the woman's education level ($p=0.001$) while in Kigezi region, Modern Contraceptive Use was significantly associated with age ($p=0.000$), the number of living children ($p=0.020$), place of residence ($p=0.036$), work status ($p=0.000$) and visiting a health facility ($p=0.005$).

Results in Annex 1 further indicate that 11% of women whose age at first birth was below 18 were using modern contraceptives compared to 45% for the same category in Kigezi region. 12% of women who started cohabiting when they were young (18 and below) were using modern contraceptives in the Karamoja region compared to 45% of those in the Kigezi region. 16% of women in Karamoja whose ideal number of children were 0-2 and 15% whose ideal number of children were 3-4 were using modern contraceptives compared to 29% in Kigezi whose ideal number of children were 0-2 and 33% whose ideal number of children were 3-4 were using modern contraceptives. Whereas only 3% of women with no education in Karamoja were using modern contraceptives, 24% of the same category in Kigezi were utilizing modern contraception. 15% and 30% of women with secondary education and above were using modern contraceptives in Karamoja and Kigezi, respectively.

The study results further revealed that whereas in the Karamoja region Modern Contraception Use was higher among older women aged 40-44 years (15%), use in other age groups was less than 10%. In Kigezi region, Modern Contraceptive Use was higher in a much younger age group 30-34 (48%) lower among the 15-19 age group (5%) and the 45-49 age group (17%), for other age groups in Kigezi region Modern Contraceptive Use ranged from 28% to 45%. Eight percent and thirty-seven percent of women who had 5 children and above were utilizing modern contraceptives in Karamoja and Kigezi respectively, and only 5% and 29% of those who had 4 children and below were using modern contraceptives in the same regions respectively.

In Karamoja, the proportion of women in rural areas who were utilizing modern contraceptives was slightly higher (6%) than those living in urban areas (5%) compared to 28% and 43% in Kigezi for rural and urban respectively. Results in Annex further show that only 6% of women in Karamoja who were working utilized modern contraception compared to 35% of working women in Kigezi and 17% of non-working women in the same region. Only 4% of women who were not working in Karamoja region were utilizing modern contraceptives.

Religion was not significant for both regions while, age, parity, place of residence, work status were not significant in Karamoja region and, age at first birth and cohabitation, the ideal number of children and the woman's education level were not associated with modern contraceptive use in Kigezi region.

4.4.4. Determinants of Modern Contraceptive Use in Karamoja and Kigezi regions

To establish differences in modern contraception in Karamoja and Kigezi regions, Modern Contraceptive Use (outcome variable) was regressed over selected independent variables in each region. Results presented in Annex show that determinants of Modern Contraceptive Use varied by region. In Karamoja, determinants of Modern Contraceptive Use are age at first cohabitation, wealth status, the ideal number of children, and visiting a health facility, while in Kigezi region use of modern contraceptives is determined by age, age at first cohabitation, education for the woman and that of her husband/partner.

4.4.5. Demographic determinants

The demographic factors analyzed in this study were age, age at first cohabitation, age at first birth, and number of living children. Age was associated with the uptake of modern contraceptives in Kigezi region only. The findings in Annex indicate that women who were aged 25-29 years, 30-34 years, and 35-39 years are 5.5, 6.3, and 5.9 times more likely to use modern contraceptives respectively compared to those who were aged 15-19 years in that region. The findings also indicate that in both regions, age at first cohabitation was a determinant of Modern Contraceptive Use. Women whose age at first cohabitation was 18 years and older were less likely to use modern contraceptives ($OR=0.21$, $OR=0.44$) for women in Karamoja and Kigezi regions respectively compared to their counterparts whose age at first cohabitation was 18 years and below. The findings further indicate that age at first birth, and the number of living children did not have a significant relationship with modern contraceptive use among women in both regions.

4.4.6. Socio-economic determinants

Socio-economic factors considered in the analysis were the woman's education level, wealth status, work status, place of residence, exposure to family planning messages, and the husband's/partner's education level. Wealth status was associated with modern contraceptive use in Karamoja region. The odds of modern contraception for women in the poorer, middle, richer and richest categories of wealth were respectively 9, 6, 12, and 30 times more likely to use modern contraceptives compared to the poorest ones. On the other hand, controlling for other factors, the association between wealth status and the use of modern contraceptives by women in Kigezi region was insignificant at the 5% level of significance. Education was associated with Modern Contraceptive Use among women in Kigezi region. Women who had attained primary and at least secondary level of education were 2 and 2.5 times more likely to use modern contraceptives respectively compared to those with no education. Relatedly, women who reported their husbands/partners' level of education as at least secondary education in Kigezi region were 2.6 times more likely to use modern contraceptives compared to those whose husbands had no education. Education however did not have a significant association with the use of modern contraceptives in Karamoja region. The woman's working status, place of residence, and exposure to family planning messages through mass media were not associated with modern contraceptive use among women in both regions at the 5% level of significance.

4.4.7. Behavioral determinants

Behavioral factors included visiting a health facility 12 months preceding the survey and the ideal number of children. Modern contraceptive use was determined by the ideal number of children in Karamoja region. Women who gave a non-numeric response to the question on their ideal number of children were less likely to use modern contraceptive methods compared to those whose ideal number was 0-2 children. Visiting a health facility was another determinant of Modern Contraceptive Use in Karamoja but not in Kigezi region.

Women in Karamoja who reported that they had visited a health facility in the 12 months preceding the survey were less likely to use modern methods compared to those who had not.

4.5. Discussion

The main objective of the study was to establish differences in determinants of Modern Contraceptive Use among women aged 15-49 in Karamoja and Kigezi regions. The study established that Modern Contraceptive Use in Karamoja is 6.5% and 43.7% in Kigezi region. This has an implication on harnessing Uganda's demographic dividend. One of the milestones for attaining Uganda's demographic transition is increasing the modern Contraceptive Prevalence Rate from 35% to 78% by 2050 (NPC, 2018), and a key strategy is to increase demand and uptake of family planning. The results of this study, therefore, have an implication on this target, unless modern contraception increases in these regions and other regions as well, there is a likelihood that Uganda may miss out of this target but also the window of opportunity for harnessing the demographic dividend.

Differences in the determinants of Modern Contraceptive Use in the two study regions existed in age, wealth status, the ideal number of children, education for the woman and that of her husband/partner, and visiting a health facility, while the similarity existed in the Age at first cohabitation. Age at first cohabitation was a significant predictor of Modern Contraceptive Use in the two study regions. Women who started cohabiting at an older age in both regions were less likely to use modern contraception compared to those who joined families at a younger age. This may be brought about by strong cultures that exist in those regions where women are expected to give birth immediately after starting families and perhaps these women may want to reach their desired number of children before they consider using modern family planning methods besides, the fact that they got married late and therefore started childbearing late, use of modern contraceptives may not be important to them. Age was associated with the uptake of modern contraception in Kigezi region but this association was insignificant for Karamoja region. The findings indicate that women who were aged 25-29 years and 30-34 years were more likely to use modern contraceptives compared to the younger ones (15-19). Women between the ages of 25 and 35 tend to use modern contraceptives because they are more receptive, use modern methods for child spacing, and are in the process of career development, young ones on the other hand lack appropriate information and user-friendly services to access family planning.

Women from relatively richer households in the Karamoja region had higher odds of utilizing modern contraception compared to those from the poor ones. The rich utilize modern contraceptives because they are empowered and understand the economic benefits of having manageable family sizes. Rich women have fewer children to ease the provision of basic needs and to attain quality children, the poor however are not empowered to make informed choices with regard to contraception. This finding explains the reason why Modern Contraceptive Use has remained exceptionally low in Karamoja region given the fact that 90% of women in this region are poor compared to only 20% in Kigezi region, only 5% are rich in Karamoja region in comparison with 44% in Kigezi region. The low uptake of contraceptives in Karamoja region may also be attributed to inaccessibility and unaffordability. Poverty impedes women from accessing family planning commodities because they lack the resources to purchase these commodities and transport them to health facilities to access these services.

Education is a key determinant of Modern Contraceptive Use in Kigezi region. Women who had attained primary and secondary plus education were 2 times more likely to use modern contraceptives respectively compared to women with no education, as people say, education is the best contraception, this explains why modern contraceptive use is high in Kigezi region given the fact that 88% of women in this region had attained primary and above levels of education. Being married or in union with a partner with at least a secondary level of education was associated with an increased likelihood of a woman in Kigezi region using modern contraceptives. This finding may imply that educated partners provide a supportive and conducive environment for the use of modern contraceptives.

Woman's work status and exposure to family planning messages through mass media were not associated with modern contraceptive use among women in the two regions of Karamoja and Kigezi at the 5% level of significance. This finding however contradicts other research findings in Karamoja which suggested that uptake of family planning was low in Karamoja region because of lack of access to family planning messages (United Nations Population Fund, 2018).

In Karamoja region, women who gave a non-numeric response to the question on their ideal number of children were less likely to use modern contraceptive methods compared to those whose ideal number was 0-2 children. This may be linked to decision-making where all reproductive health decisions of a couple are made by husbands.

Women who had visited a health facility in the 12 months preceding the survey were less likely to use modern methods compared to their counterparts who had not, which is ironic because it is expected that women who have access to health facilities tend to utilize modern contraception as other studies found out (Mandiwa et al., 2018), (Palamulemi, 2013). This probably may be attributed to service delivery challenges like long queues at health facilities, staff absenteeism, and stockouts which contribute to inadequate client satisfaction at health facilities.

4.6. Conclusion

Whereas the government and partners have been holistically developing family planning strategies for all regions in Uganda, the findings of this study revealed differences in the determinants of modern contraceptive use. Differences were in age, wealth status, the ideal number of children, education for the woman and that of her husband/partner, and visiting a health facility, while the similarity existed in the Age at first cohabitation.

Scaling up family planning, especially in regions that are performing poorly in modern contraception like Karamoja will be very crucial at this point if Uganda is to accelerate the demographic transition to harness the demographic dividend and achieve the Vision 2040 goal of attaining the upper middle-income status. Family planning has been regarded as the most cost-effective intervention to prevent maternal, infant, and child deaths globally contributing to the attainment of national development objectives as well as contributing to positive health and social outcomes, through reducing poverty, increasing gender equity, and preventing the spread of HIV. Family Planning is one of the game changers for harnessing the Demographic Dividend.

4.7. Policy recommendations

1. To increase the uptake of modern contraceptives in Uganda, Government should address regional inequalities in access by redesigning regional-specific family planning interventions to address the salient issues in the regions.
2. Government should invest in income-generating programs to alleviate poverty in the Karamoja region. Scale-up wealth creation programs like providing business startup capital to women to increase their incomes.
3. Invest in education to enhance human capital development. This will empower women and girls to make the right family planning decisions and choices.
4. Government and partners need to develop targeted family planning messages for specific groups of women in specific regions to increase family planning utilization, acceptability, and adaptation of a smaller ideal number of children.
5. The government needs to address service delivery challenges like long queues at health facilities, staff absenteeism, and stockouts to improve client satisfaction.

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5.0. Introduction

The UN Convention on the Rights of Persons with Disabilities guarantees persons with disability the right to access the same range, quality and standard of free or affordable health care and programs as provided to their non-disabled counterparts. Such services include general population-based public health interventions and Sexual and Reproductive Health(SRH)(United Nations, 2006). Nonetheless, existing evidence suggests the quality of life of Persons with Disabilities (PWDs) is affected as majority face several challenges in accessing and utilizing essential health care services (Becker et.al, 1997; United Nations, 1989).Obstacles include the negative social attitude shown by health workers, lack of confidentiality, the communication gap and poor dissemination of information (Caroline et.al, 2012; Fazee et.al, 2006). Moreover, this situation is not only unique to Africa but it is also happening in western countries as evidenced by various studies.

Furthermore, despite the call for Universal access to reproductive health services at the 4th Population and Development Conference in 1994 in Cairo, many persons with disability have not realize this right. Similarly, although Uganda has made effort to align her Universal Health Coverage (UHC) to a number of her frameworks including the national vision 2040, the national development plan III, the second national health policy, the health sector development plan and all the health sector strategic plans including the Health Financing Strategy, access to sexual and reproductive health (SRH) services by persons with disability remains a serious challenge (NPA, 2013, NPA, 2020, MoH, 2010, MoH, 2015).

Noteworthy, persons with disability are sexually active but not empowered enough to prevent themselves from infections such as Human Immuno Virus (HIV), Sexually Transmitted Infections (STIs), unwanted pregnancies that may lead them to opt for abortion as a solution. Many get married under the influence of parents and caretakers without their involvement in decision-making. On a whole, they have difficulty in accessing Sexual and Reproductive Health Services (SRHR) yet these are human rights that would allow them to make informed decisions about relationships, their bodies, family planning, sexuality, and wellbeing. A full range of sexual and reproductive health services, including antenatal and maternal care, prevention detection and treatment of STIs and HIV, choice of safe and effective contraceptive methods, prevention and management of sexual and gender-based violence, and positive comprehensive sexuality education are not always accessible to persons with disability. Moreover, the constitution of the republic of Uganda (1995) as amended to 2018, Article 35 states that "Persons with disability have a right to respect and human dignity, and the State and Society shall always take appropriate measures to ensure that they realize their full mental and physical potential". It is clearly stated in the constitution of Uganda that the Government shall implement laws of Uganda without discrimination on the basis of disability. The Persons with Disabilities Act (2020) specifically prohibits any healthy unit from being discriminative in provision of health services to persons with disability disabilities including young women living with disability. These include those with short stature/little women, deaf, dumb, physically challenged, albinos, those with multiple disabilities among others.

This article highlights gaps in access to Sexual and Reproductive Health services for young women with disability in four selected sub-counties of Mayuge and Bugiri districts focusing on their perspectives and experiences.

The study did not directly interview young women with intellectual disability/mentally challenged even if the findings are generalized to assume that they experience similar challenges if not worse given their multiple vulnerabilities.

5.1. Problem statement

Although the Government of Uganda has dedicated effort to mainstreaming disability in development through promoting inclusion, participation and involvement of persons with disability, there are still multiple violations of rights, stigmatization, discrimination and exclusion of persons with disability irrespective of age and sex. Rural young women with disability continue to face barriers in the internal and external environment thus fail to achieve their full Sexual and Reproductive Health and Rights yet are in the reproductive age group. These are often sexually coerced and exposed to unsafe sexual practices with minimal access to health education, lack of access to voluntary and modern contraceptives, inadequate maternal health care, inadequate SRH information, inability to protect self from STDs and HIV/AIDS.

These challenges arise because disability is generally perceived negatively due to ignorance, multiple social-cultural factors and lack of commitment to prioritizing issues concerning persons with disabilities in terms of planning and budgeting.

As well, communication barriers between the young women with disability who have speech and hearing impairment with their would-be health service providers leads to social exclusion in RH service provision. There is general scarcity of evidence-based information and documentation on SRH related challenges and experiences of young women with disability. Sexual and Gender based Violence continues to occur given a complex web of disability-based discrimination that accelerates denial of access to Sexual and Reproductive health services. Reports of districts targeted by this study remain silent on the status of SRH for women and girls with disabilities. The situation seems not to be any different in other rural districts of Uganda. Arriving at possible solutions requires adequate information on the current needs and challenges faced by the young women with disability and their caretakers seeking to claim their sexual and reproductive health and rights.

In recent years, a number of studies have explored the factors affecting access to and utilization of health services for persons with disabilities in general while others have specifically only singled out individual categories such as those with physical disabilities. This study explores challenges specifically faced by young women in their reproductive age group with different forms of disability. It explores critical gaps in SRH service provision and suggests policy recommendations to better the health and general well-being of young women with disability.

5.2. Objectives

The overall objective of the study was to understand issues of Access to Sexual and Reproductive Health, the challenges and gaps as experienced by young women with disabilities in Mayuge and Bugiri districts.

5.3. Specific objectives

The specific objectives of this study were three-fold:

- To establish whether young women with disability in Mayuge and Bugiri districts have access to Sexual and Reproductive Health Services.
- To establish the Sexual and Reproductive Health challenges faced by young women with disability in Mayuge and Bugiri districts.
- To identify the policy gaps in Sexual and Reproductive Health Service provision for young women with disability in Mayuge and Bugiri districts.

5.4. Methodology

5.4.1. Study design

This study adopted a qualitative descriptive research design that was phenomenological in nature. Using a descriptive design helped in gathering information for a deeper understanding of how young women with various forms of disability

experience access to sexual and reproductive health services, how they perceive and feel about it. Specifically, in-depth interviews were used to collect data from the study participants. This allowed in-depth exploration and understanding of experiences and perceptions of young women with disability concerning SRH. The researcher was able to explore personal as well as health and social well-being issues of young women with disability.

5.4.2. Sampling

The study participants were purposively selected being identified through Integrated Disabled Women Activities (IDIWA), a voluntary, not for profit Non-Governmental Organization established in 2000 by Women and Girls with Disabilities and parents of girl children with disabilities. The organization is based in Iganga District and extends its services to other neighbouring districts including Bugiri, Mayuge which are said to have higher numbers of persons with disability in the Eastern Uganda region.

The study population consisted of young women with disability in the reproductive age group of 18-30 years (Uganda National Youth Policy, 2001). A representative number of 120 study participants in equal numbers sub-county were interviewed. This particular demographic was selected because these females seem to have similar challenges relating to SRH. Understanding their SRH challenges required ample contact time being spent on each individual research participant. Participants were specifically selected from the sub-counties of Bukatuube and Buwaya in Mayuge district and Buwunga and Bulesa in Bugiri district. The study was cognizant of the principles of research ethics, procedures and with vulnerable populations.

Table 5.1 shows a breakdown of the six categories of study participants:

Table 5.1: Breakdown by category of disability of study participants

S/N	Category of participants	Sample size
1	Young Women with Albinism	10
2	Young women with short stature	15
3	Visually impaired Young women/ blind	30
4	Young women physically challenged	30
5	Young women with Speech impairment/dumb	20
6	Young Women with hearing impairment /deaf	15
Total		120

Qualitative studies require reaching saturation and thus saturation was reached at 120 participants and was deemed sufficient for the qualitative analysis and scale of this study. Sixty participants were selected from each of the four Sub-counties. Confidentiality was observed through the use of pseudonyms and consent was obtained through use of consent forms for the young women with disability. Permission was obtained from the participants in order to record the interviews.

Table 5.2: Breakdown by marital status of study participants

S/N	Category of participants	Sample size
1	Married legally	10
2	Cohabiting	50
3	Separated with Spouse	40
4	Widow	10
5	Never Married/single	10
	Total	120

The researcher purposively selected participants by marital status to have a picture of whether any of their different experiences and perceptions. Given the nature of the study variables, the cohabiting and legally married category were selected in large numbers as compared to other categories of participants.

5.4.3. Data Collection methods

a) Data collection instruments

Research tools were developed, pretested and adjusted accordingly. The researcher organized and managed the primary data collection and was mindful of quality assurance of the data collection process. Data was gathered using five-open ended questions on a researcher-administered questionnaire.

b) Procedure

During the interviews, the researcher worked closely with helpers/care takers of young women with disabilities which gave the participants confidence right from the start to the conclusion. With consent of young women with speech impairment/dumb, deaf and for any study participant with multiple disability that included being dumb and deaf, their caretakers were instrumental in translating and interpreting the information using sign language. The caretakers were informed prior to the interview and often alerted to do the interpretation using direct translation and interpret without alternating the meaning. For all interviews, it was clearly explained at the start of the interviews that a study participant is free to ask for a break in between the interview session and refresh herself as a means of reasonable accommodation. This information was also translated to the participants by their caretakers. The researcher was thus patient during the exercise of data collection as all these processes required a lot of time with back and forth translations and interpretations.

The study used in-depth interview guides to elicit data from the young women with disability. The researcher ensured that the participants were comfortable by building rapport and creating an atmosphere conducive for discussion. Probing was also done in order to gain a deeper understanding of the background underpinning the participants' responses to questions.

5.4.4. Methods of Data Analysis

All interviews were recorded verbatim, transcribed and then the transcriptions were read in order to understand the information collected and remove all unnecessary data. The researcher then made use of the QDA Miner lite, a software for qualitative data analysis, to analyze and identify recurring themes and patterns which addressed the research questions.

5.4.5. Findings and Discussion

The findings of the study reveal that irrespective of marital status, all the young women with disability interviewed expressed how they require access to SRH services and narrate the multiple challenges they encounter in the process. Top on the list are the negative social attitude and cultural assumptions by health service providers. This finding was most commonly mentioned by young women with physical disability in Buwunga and Bukatuube Sub-counties. Wrong attitude reflected by the non-disabled counterparts was more commonly mentioned by young women with Albinism of Buwaya sub-county while the challenge of delays at health facilities was most common in Bulesa sub-county and highly revealed by women that are deaf-dumb and the dumb-blind category. The communication barrier and information gap as well as unfriendly physical structures were common in all sub-counties and mentioned by more than ninety percent of the study participants. The high costs for the services was a challenge commonly mentioned by study participants with hearing and visual impairments in Bukatuube and Buwaya Sub-counties.

These findings suggests that because of high level of vulnerability, it is difficult for young women with disability maintain a stable relationship without intimate partner violence and sexual abuse.

Furthermore, the findings reveal that the most common services offered in health centers and hospitals in relation to SRH and disability include: General care, antenatal and maternal care, HIV counselling and Testing, HIV treatment, Treatment of sexually transmitted infections, Family Planning, Nose and throat care, orthopedic care, mental health care, eye care and ear, treatment of epilepsy

However, participants highlighted that sometimes certain services are not provided due to poor planning, lack of involvement of young persons with disability in planning for the relevant SRH activities, gender-based discrimination and the absence of professionals. On the later, participants reported that

"Many of our health professionals spend their time carrying out private work in private hospitals and clinics. One can hardly find them even when you try to arrive early. Moreover, the services they provide to us are quite expensive and unaffordable as you are aware that majority of us are poor women who do not have a periodical income".

Other reasons for not offering services to young women with disability include lack of wheel chairs for women with disabilities and inadequate supply of medicines in government health care centers which often are not well stocked with the required medicines. This finding was common in the sub-counties of Bulesa and Buwunga.

5.4.6. Accessibility of the Health care Environment and Services

Eighteen out of the one hundred twenty study participants were expectant mothers with more than half of them living with multiple disability in the category of physically challenged, the ones with short stature, the deaf-dumb and blind-deaf. These were spread across all the four study Sub-counties and narrated how they find it difficult to reach the health centers especially that they add on kilograms of the fetus and heavier than usual yet have either to use crutches or to be supported by their caretakers. Others use wheel chairs that spoil quickly in the process without any opportunity for replacement. The blind and deaf-blind expressed how they are also helpless without faster means of transport to reach the health centres that are between 6 to 12 kilometers far from their homes in case of an emergency and more so when it is their due date. Among the challenges expressed is still birth, loss of their babies and that some of their colleagues have lost their lives in the process. These findings were common in Bulesa, Buwunga and Buwaya sub-counties. Moreover, Uganda National Planning Authority (2020) in the NDP III document highlights that over the NDP II period, access to utilization of health services significantly increased with a population living within a 5Km radius of a health facility. However, we tend to forget that such a distance is much longer for most of the persons with disability given the barriers they experience thus hindering access and utilization of SRH services. It is also results into high infant mortality and maternal mortality affecting families of young women with disability as they have expressed.

Furthermore, even when UNPA (2020) in NDP III highlights that the health infrastructure network improved during implementation of NDP I & II, with medical officers, clinical officers and enrolled comprehensive nurses present, the study findings reveal that these are not trained in sign language to improve HRS service provision. Thus, young women who are deaf or have a hearing and speech impairment cannot find much help and this is a push off factor in access and utilization of SRH services thus leaving them with no option.

A thirty-year-old visually impaired participant voiced:

I am deaf-blind and when I went to the health centre last week for antenatal care, the nurse took me to the room and told my caretaker to stay behind. The nurse then used abusive vulgar language questioning me why I got pregnant because a person like me with disability, I am not expected to have sex even to conceive. Although I did not want my caretaker to hear what I was going to tell the nurse, I later regretted why she was told to stay behind. I felt isolated when she left me for over 40 minutes where she took me and I could not walk myself to anywhere. Later, she transferred me where there were other people and I could not hear well what was being communicated. I missed out on almost all information. If I could walk myself back to my specific point of arrival, I should have gone back to ask my caretaker to come and listen then tell me. I had to talk to the person sitting next to me walk me the waiting room to find my caretaker. I stayed the whole day angry yet I was the first person to arrive at the health centre.

Kristin et. al. (2018) asserts that due to barriers in the physical and social environment, people with disabilities are less likely to have access to relevant SRH services. The above narrative portrays how it is not only about access but also services are not disability friendly among the many challenges that surface when persons with disability try to access the services.

5.4.7. Sexual Abuse and Exploitation

More than half of the participants that have visual and hearing impairment expressed sexual violence in form of marital rape and also rape by unknown offenders. This was in Bukatuube and Buwunga Sub-counties. This is said to have resulted into some of them acquiring not only HIV but also other Sexually Transmitted Infections and unwanted pregnancies. They often face challenges of meeting the standards to secure prosecution. This finding reveals how far Ugandans are from achieving a highly moral and ethical society (Vision 2040). Similarly, young women with physical disability also expressed vulnerability as they face challenges of not being able to fend off attackers. Although NDP III concurs that low investment in social protection systems has impacted on vulnerability levels of the entire population, it is worth noting that vulnerability for persons with disability is more than double calling for urgent intervention.

A twenty-seven-year-old expectant mother with hearing impairment voiced out her experience:

One evening, as I was going to collect water from the well. Our neighbour made signs calling me. I diverged and branched to their home. She gave me some jack fruit which I enjoyed eating. As I stood to go, I felt people pulling me. Even if I shouted, they continued to pull me until they locked me in one of their rooms with a man who I could not recognise. Later, I found myself pregnant and this is the pregnancy I am still carrying as you can see. Because of fear of being laughed at, I remained silence. I am now even confused because on my last visit to the health centre a month ago, I tested HIV positive. Poor me. I do not want to say much but I am very disappointed by myself. I will think of who to share with on my situation in the community but I am not sure I will even like the child I will produce. I sometimes even lack the basic needs and there is no body to turn to. What if I produce the child, will I manage? Also, as explained by the nurse, I have to take daily medicine for HIV and she said I need to eat well, will I eat grass?

In respect to the above experience, Kristin et. al., 2018 and Fiasorgbor, 2015 assert that potential perpetrators include family members, neighbours and health service providers with a likelihood of violence resulting into new forms of disabilities. Whereas some young women with disability sounded to have knowledge about some of their rights, the findings reveal that enjoyment of their rights cannot be fully realized because of the many barriers that are in their vicinity that add to their vulnerability as reflected in the above narration.

Similarly, the findings reveal that irrespective of type of disability, some young women live in a series of abusive relationships. Little persons also known as persons of short stature were the most affected. Their so-called sexual partners do not want to identify with them in public while others just sneak to their houses at night only to make them pregnant and deny responsibility. In addition, the lack of support to teenage mothers with short stature and those living with physical disability to enable them return to school is said to accelerate early marriages for these young women with disability thus adding to the high number that is currently cohabiting. This finding was common across all the four sub-counties.

In addition, results indicate that when young women with disability try to go to access health services, they are not treated well like their non-disabled counterparts. This finding was common to over 90% of the study participants across the four sub-counties. They also have to struggle to get to the long queue and wait to access the costly SRH services and they are among the Ugandans who desire to have access to affordable quality health care (Vision 2040). Many also reported lack of any special consideration at the health facilities irrespective of whether they have gone to access antenatal services (Noah, 2017).

5.4.8. Family planning and Contraceptive Use

The findings reveal that a few who manage to access family planning services are educated by health workers that contraceptive methods are quite good and helpful but narrate their experience as being to the contrary since they have had unpleasant experiences. This makes their colleagues fear and resent to access family planning services. This finding was more common in Buwaya and Bulesa Sub-counties and cuts across all forms of disability including little persons.

A twenty-five-year-old physically disabled voiced out her experience:

When I went for family planning for the first time, the nurse asked me what happened that I do not have limbs and why I need to be on family planning. I had to be aggressive and I answered back asking her that, do you think I do not have blood and that I do not want to have sex? She came to her senses since she also realised that I am an educated woman with disability and able to speak English. However, many of my colleagues fear to go because of the negative attitude shown by health workers. Those that fear to go have ended up not using family planning and they have to produce so many children whose basic needs they cannot meet because as you know most of us live in poverty. Also, the health workers do not give us much information because they assume that we do not need it since we should not be having sex as women with disability.

From the above tale, it is clear that the negative social perceptions of health workers is a huge barrier to accessibility of family planning services for young women with disability as well as the limited information tailored to the health needs of women and girls with disabilities. No wonder young people contribute greatly to high population in Uganda with unfavourable demographic profile (Vision 2040; NPP, 2018).

Furthermore, majority of health workers seem to see the disability first rather than the person who has a disability, thus the negative attitude towards young women with disability limiting their access to SRH services.

A twenty-three year visually impaired albino lady narrated:

I have limited knowledge about the family planning methods. When I went to the health center, the health worker never gave me time to speak to her. She ran away shouting calling her friends and she never appeared again. When I decided to go to another distant health center after using the injection which my peers had recommended, I presented my problem that I had severe breeding. The nurse quickly shouted at me saying that despite my being an albino with visual impairment, I am now coming to her with other issues. She asked who told me to use contraceptive and why I wanted it. This made me fear to explain that the injection had made me loose appetite for sex because I knew that the next question would be asking me what I need sex for. The truth is that the injection has given me more problems as it disorganized my hormones but when I mention this to any nurse, they seem surprised! Up to today, I cannot conceive. I tried to visit another health center in another sub-county but none of the health workers I have spoken to so far can give me a satisfactory answer. Each explains different answers and none is connected to another. So, for me now I advise fellow young women with disability not to go for family planning because it is all complicates life.

From the experiences of young women with disability regarding access and use of family planning services, it is clear that the uptake is low given that health workers do not give time to explain in advance possibly because they are few in number or they do not have specific interest in attending to persons with disability. It could also be attributed to the fact that the nasty experience in the use of family planning leads to low advocacy for it among young women with disability yet these are in their reproductive age and are expected to make use of it. As well, the above findings affirm that young women with disability are often marginalized by health workers implementing sexual and reproductive health programmes. They continue to experience heightened discrimination and violence on account of disability and gender thus double vulnerability.

The findings also reveal that many existing programmes meant to promote Sexual and Reproductive Health Rights seem not to take into account the unique dangers and challenges faced by each category of young women with disability especially little persons/ dwarf and others. There is limited access to disability-friendly Sexual and Reproductive Health information and services, which impact on the ability of young women with disability to make informed and healthy life choices.

5.4.9. Access to HIV/AIDS and STIs Services

In relation to accessing HIV/AIDS services, the findings reveal that some young women with disability fear to go the health facilities because health care workers often involve family members in case one is found to be HIV positive (UBOS, 2020). This may explain an increase in parent to child transmission of HIV. Moreover, HIV is higher among women (NPP, 2018). As well, one wonders why women with disability are not mentioned by the NPP among the categories of those that are at higher risk of vulnerability to HIV.

A twenty-eight-year lady with hearing impairment narrated her story with the help of a sign language interpreter:

Even if my HIV test showed that I am HIV positive when I went for antenatal care, I feel that certain things are confidential to me. I do not need my relatives to know because for some of them our relationship will end and who will support me? I know that when I go back for medication, it will all start with counselling but all that I would want to say should not be heard by my relatives yet I know the health workers will forcefully invite them in the room. Then I will keep quiet like I did before. So, why do I have to waste my time to go back to see the health worker? She hates me because she remembers me very well. I will try to go to another health Centre if I can find transport. It is far but I will still try my luck.

Another physically impaired twenty-three-year-old expressed that;

Some of my colleagues are shy. I happened to be a mediator to support some of them to access HIV medication. After the CD4 cell count had been done at the health center for my two colleagues, they introduced me to the health care worker to enable me take medication for them. This is so because they feared to be seen on Thursdays which was the day earmarked for people living with HIV, to always collect their medication. It is over six months when I deliver medication to their homes. They fear to be stigmatized because they already got affected by disability stigma. Others are always asked by health workers and people in the community how they got HIV. I have learnt that when I am friendly to my colleagues, they get to trust me and share their problems. Others who acquire sexually Transmitted infections (STDs) and have no transport to go to the health center also trust me to help them. Mostly when their sexual partners get to know about STDs, they quarrel and find other sexual partners mainly the non-disabled.

When asked about what they know about why young women with disability do Abortion
One visually impaired lady asserted:

Last year, I had to abort at 3 months because among the six men that had sex with me, I did not know to who the pregnancy was for. I had tried to tell one of them about the pregnancy and he did not want to know. He said that for him at their home they do not even produce, so where did I get the pregnancy? I had to seek advice from my peers who recommended one expert at the neighbouring district. I had to become strong to abort and avoid future unmanageable circumstances.

From the above finding, it can be deducted that peer-to-peer information exchange is sometimes misleading if not conscientized on correct information. Thus, a need to have selected young women with disability trained as peer educators in their own communities as part of solving this challenge.

5.4.10. Antenatal and maternal Care Services

The findings reveal that for young expectant mothers with physical disability and those with short stature, the labour beds are unavailable and a few health centers that have such beds are inaccessible. On a whole, there is also lack of examination tables that can be accessible. These challenges reflect lack of proper planning in service provision with a weakness in prioritizing budgeting for specialized equipment that is required in provision of SRH services to meet the SRHR of young women with disability moreover, the Youth National Action Plan commits to effectively provide friendly services including enhancing M&E (MoGLSD, 2016). As well, improving the allocation of resources, increasing efficiency in use of resources, and giving more attention to effectiveness through monitoring and reviews are cited as some of the key strategies (Vision, 2040).

5.4.11. Conclusion

The provision and uptake of quality and disability friendly SRH services to young women with disability remains low in Bugiri and Mayuge districts where they seem to be a forgotten category of persons especially in maternal health care, HIV care, support and prevention as well as in family services among other SRH entitlements. This shows lack of proper planning and budgeting for SRH services for persons with disability. This is a major hindrance to promoting disability advocacy amidst the gender and disability intertwined challenges experienced by young women with disability.

There is lack of a voice for young women with disability on all matters affecting their bodies, even if they have unmet needs thus the international slogan "Nothing about Us without Us" seem to be forgotten in policy making, programming and budgeting. From the findings, a standardized referral system for stakeholders in health seem to be missing. Thus, no clear accountability and feedback mechanisms as there is some silence on the link between SRHR and disability issues in planning and actual programme implementation.

Additionally, the strategies being undertaken by the health policy are not explicitly stating how young women with disability especially those in their reproductive age group can be supported to access disability friendly Sexual and Reproductive Health Services yet health facilities are expected to support this most vulnerable category of persons.

5.5. Policy Recommendations

There is urgent need for the Ministry of finance, planning and Economic Development to incorporate a specific budgeting line for items required to boost the provision of disability friendly sexual reproductive health care services. Consideration should be needs-specific on what is required for each category of persons with disability. Appropriate high quality items must be purchased and distributed to all health facilities irrespective of location and level of facility as women with disability are entitled to accessing SRH service at different locations across the country. Noteworthy, the planning and budgeting should be guided by a well-designed standardized disability friendly SRH care package. For instance, sign language interpreters should be hired atleast one at each health center or train staff in sign language; braille should be availed to enable young women with visual impairment access and utilize information on SRH; standardized beds for clients with short stature among others. This should be done for all health facilities across all districts in the country. The package should include tips to improve health care for clients with various forms of disability in order to pursue their health rights through legally binding principles.

Disability Rights should be part of the curriculum for training health professionals at different levels thus, a specific curriculum ought to be designed. For instance, the course unit can be named Disability Mainstreaming in Health.

It should be mandatory for all SRH workers who are already in employment to undergo a tailor-made Disability Equality Training (DET) Program that is dynamic, highly participatory and interactive in order to stimulate attitudinal change towards disability inclusion in health. This programme should also be rolled out to employers, government officials who engage in policy and programming and other decision-makers, social partners, NGOs, civil society and the general public. This will create active awareness of, and commitment to, realizing the human rights of persons with disabilities including young women with disabilities; make an important contribution to improving their opportunities to equal access to Sexual and Reproductive Health programmes and social life; create deeper understanding of impairment, barriers and disability and how these impact on the lives of persons with disabilities in general.

Using a twin track approach, disability mainstreaming and targeting disability specific issues should be made mandatory for all government and private health facilities with proper record keeping. This should be done together with involvement strategy for male partners to achieve the SRH for young women with disability most of whom are cohabiting.

For sustainability purposes, caretakers, community volunteers, village health committees and local leaders need to be involved in promoting disability friendly services in SRH.

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6.0. Introduction

Family planning is one of the most cost-effective interventions for improving human capital development with enduring health and welfare benefits for women, families, and nations (Michele Gragnolati- World Bank 2016). There is a wealth of knowledge that explains that the promotion of family planning in countries with high birth rates has the potential to reduce poverty and hunger and prevent 32% of all maternal deaths and nearly 10% of childhood deaths (Cleland 2006). Access to safe, affordable and voluntary family planning is central to gender equality and women's empowerment and is a key driver for socio-economic transformation and development. Family planning also substantially contributes to achievement of universal primary schooling, and long-term environmental sustainability.

The ability to decide freely the number, spacing and timing of children is a fundamental human right (Population Media Centre, 2018). Government of Uganda (GoU) in 2012 committed to increase domestic resources for family planning in the FP2020 Commitments. This commitment was renewed in 2017 and in 2021 (FP2030 commitments). The FP2020 Commitments resulted into the First National Family Planning Costed Implementation Plan (FP-CIP I)(2015-2020) which provided an overarching framework for addressing FP concerns in a human rights approach. The FP-CIP provided the costing for FP interventions over a period of 5 years to the tune of 235.1 million USD (MoH, 2014).

The National Planning Authority (NPA) modelled investments for harnessing the Demographic Dividend in 2017 and the projections arrived at using the DemDiv, a modelling tool developed by the Health Policy Project showed that investing in family planning and education will give the additional benefit of \$3,000 to achieve a per capita income of \$9,567, instead of \$6,084, which is projected, if only economic reforms are pursued to achieve the Vision 2040.

The Investment Case for family planning, derived from the ImpactNow (Health Policy Plus Project 2018), an Excel-based model that estimates the health and economic impacts of family planning revealed that Uganda was over ambitious in setting the FP2020 commitments and was not likely to achieve the goals (UNFPA 2018).

To achieve better FP outcomes, Uganda has put in place policies and strategies to improve FP, as well as Reproductive, Maternal, Newborn, Child and Adolescent Health. These include among others, the national FP CIPs (2014/15-2019/20 and 2020/21-2024/25), the National Sexuality Education Framework 2018, the Family Planning Social Behavioral Communication Strategy (2016- 2021), FP Advocacy Strategies and the National Strategy for Male involvement/participation in Reproductive health, Maternal, Child, Adolescent Health and Rights- Nutrition including HIV/TB. Uganda has also established the National coalition of champions and advocates which has worked with several stakeholders to focus FP advocacy, in addition to registering DMPA SC (Sayana press) for home use and self-injection among the short-term FP commodities distributed through Village Health Teams(VHTs). Government has also used results-based financing (RBF) to provide incentives to some health facilities to deliver more and better quality RMNCAH services including family planning. Implementing partners (IPs) and the private sector have designed and rolled out male involvement initiatives in some districts to address the related challenges affecting contraceptive uptake and supplemented government efforts in offering FP services.

The Government of Uganda (GoU) and Development Partners have made investments in population and health programs that are guided by the Sustainable Development Goals (SDGs), the International Conference on Population and Development (ICPD) agenda and other global, regional, and national population and development commitments. The third National Development Plan (NDP III) (2020/21-2024/25) gives guidance on interventions in the Human Capital Development Programme under which the health, education and social development sub-programmes fall, and ultimately

family planning. Ministries, Departments and Agencies (MDAs); districts; implementing partners; Civil Society and other stakeholders are contributing to these interventions to ensure that Uganda achieves Vision 2040 of becoming a Middle-Income Economy, while harnessing the Demographic Dividend.

The health sub-programme under the Human Capital Development (HCD) programme contributes to the delivery of nine result areas and they include among others, reduced unmet need for family planning from 28% to 10%; increased modern Contraceptive Prevalence Rate (mCPR) from 35% to 50%; reduced teenage pregnancy rate from 25 % in 2016 to 15%; reduced neonatal mortality rate from 27/1,000 to 19/1,000 live births; and reduced Maternal Mortality Rate from 336/100,000 to 211/100,000 live births. All these call for a conducive family planning policy environment and adequate financial resources.

The national and international commitments to family planning have however, not yielded adequate contraceptive practice because fertility, population growth, and unmet need for family planning have persistently remained high (MoH 2021), with fertility decreasing slowly. The low uptake of family planning services is caused by the desire for large family sizes propagated by cultural practices such as polygamy, bride price, security in the number of children, and sex preference; religious beliefs opposed to modern methods of FP, lack of partner support and lack of family planning services for young people (UBOS 2016).

The cross-cutting contribution to the achievement of the Sustainable Development Goals (SDGs) and the Demographic Dividend makes greater investment in family planning compelling. However, financing for FP in Uganda has mainly been through donor support (MoH 2021) with government putting inadequate resources, leaving a huge funding gap. The considerable achievements to date may not be sustained on account of the government to increase funding for family planning. It is therefore pertinent to urgently rethink the strategies and plans in place and refocus the family planning investments to attain the commitments made at national and global levels.

6.1. Problem statement

Uganda's family planning programme has been inadequately funded. The Ministry of Health Strategic Plan (2021/2022 – 2025/2026) requires approximately UGX 9.42 trillion over the five (5) years of its implementation with a financing gap of UGX 1.5 trillion. Government committed to annually ring fence 50% of the domestic resources allocated for procurement, warehousing and distribution of FP commodities from the reproductive health (RH) commodities budget (NMS Vote 116 under Output 15- Supply of Reproductive Health Items) by 2025 to achieve mCPR for all women of 39.6% by 2025 and reduce unmet need for FP to 15% by 2025.

Progress towards the attainment of these financial commitments has been very slow thereby limiting access to and use of FP by all who need them, when they need them. The FP programme does not adequately target adolescents, young people and first-time parents, yet teenage pregnancy rates have remained persistently high for more than a decade. There is limited use of data to drive FP-related decisions and programming; weaknesses in the multi-sectoral engagement for FP service delivery, as well as uneven sub-regional partner support due to poor FP partner coordination, which contributes to inequitable access to FP information and services. There is poor policy implementation and FP commodity stock outs with the Alternative Distribution System suffering logistical challenges and VHTs, supposed to distribute short-term FP commodities still working on voluntary basis, which affects the FP programme. FP outreaches, which would bring FP services closer to the people, including the Long Acting and Reversible Contraceptives (LARCs) have been left to implementing partners. There is need to refocus FP investments to address key constraints to FP access and utilization if Uganda is to achieve her FP2030 goals. This article discusses how Uganda's FP investments can be refocused to realize the FP2030 Commitments.

6.2. Objectives

The overall objective of the study is to explore why Uganda's family planning investments have not yielded the intended goals.

6.2.1. Specific Objectives

The following are the specific objectives of the study.

- To examine Uganda's commitments in family planning provision.
- To analyze Uganda's family planning financing flow.
- To find strategies for improving the FP funding situation.

6.3. Methodology

The approach to the study was purely qualitative and focused on conducting literature review.

It involved reviewing of relevant policy and budget documents, as well as strategic Plans and institutional reports from NPA, NPC, MoFPED, MoH, NMS and GFF as well as form Development Partners such as UNFPA, USAID and the World Bank.

6.3.1. Study design

The study was qualitative in nature, using secondary data collected by the Quantification, Procurement and Planning Unit (OPPU) of Ministry of Health, National Medical Stores and Ministry of Finance, Planning and Economic Development. This is administrative data used for service provision, and guiding programme implementation.

6.3.2. Data and data sources

The family planning budget and investment data and expenditure data from GoU budget, NMS expenditure data and MoH URMCHIP/GFF data was used during the study. The investment and expenditure data are from procurement of FP commodities. Additional data was collected from UBOS and the annual Performance Monitoring for Advocacy (PMA) data that show the performance on fertility, CPR and unmet need for family planning. In addition, collation of existing relevant Health Management Information System (HMIS) and DHIS II data was done.

6.4. Findings and discussions

6.4.1. Uganda's family planning commitments

His Excellency, the President of the Republic of Uganda presented the FP2020 commitments at the London Summit on Family Planning in 2012, and these were renewed in 2017. The commitments aimed at reducing unmet need for FP to 10% and increasing mCPR to 50% by 2022. The commitments focused on improving the family planning policy environment and political commitment; funding for family planning; and system strengthening and service delivery.

6.4.2. Policy and political commitments

In the FP2020 Commitments government committed to develop and implement an integrated family planning campaign; create an enabling policy environment for family planning, increase financial investment into health human resources development; strengthen the delivery of health services; conduct half yearly RH/FP reviews by the Ministry of Health; ensure timely completion of the Annual Household Panel Surveys by Uganda Bureau of Statistics to ascertain progress on heath, including FP service delivery; carry out a robust evaluation of all FP investments in Uganda; accelerate passage of the National Population Council Bill into law; make inter-ministerial structure functional and appropriating the necessary budget support; and review the current post-shipment testing policy on male and female condoms in line with current international standards to reduce delays in release of vital RH supplies, including FP supplies.

These commitments led to development of Uganda's first FP CIP (2015/16-2019/20 that provided an overarching framework for improving FP services in the country. Implementation of the FP CIP led to increased access to FP as several implementing partners (IPs) designed and rolled out targeted strategies, but the country is still far from achieving the targets. The National Population Council Bill was passed and the National Population Council was established in 2014 by an Act of Parliament, with the mandate to coordinate the population programme in the country and to promote and popularize the National Population Policy.

Considering Uganda's demographics, the country developed the National Sexuality Education framework that sought to create an overarching national direction for response in respect to sexuality education in the formal setting of educating young people in Uganda. The framework was meant to guide information sharing with many Ugandan adolescents and young people who are continuously exposed to sexual and reproductive health challenges, such as high cases of early marriages, teenage pregnancy, sexually transmitted diseases including HIV/AIDS, and sexual and gender-based violence. Despite the approval and launch in 2018, implementation of the framework has faced opposition from some stakeholders, especially religious leaders.

The draft School Health Policy and the Adolescent Health Policy aimed at mainstreaming adolescent health concerns in the national development process and provide guidelines for addressing adolescent health concerns and create an enabling legal and social-cultural environment that promotes provision of better health and information services for young people have remained drafts for over two decades. This has affected the legal and social protection of young people especially the girl child against harmful traditional practices and the right to access FP information and services. Implementation of the developed adolescent policies has therefore remained slow. There is need for proper coordination as implementation of these policies requires a multi-sectoral approach.

Availability of FP commodities at all FP service points and community-based FP distribution are key for Uganda to achieve FP2030 goals. The development of the Alternative Distribution Strategy and Implementation Manual for contraceptives and other RH commodities (2016-2020) led to an improvement in the implementation of the Alternative Distribution Strategy (ADS) because of inter-ware house transfer of stock. The ADS has played a major role in increasing access and equity to the private sector. Joint Medical Stores (JMS), a faith based national pharmaceutical warehousing and distribution firm is mandated to distribute pharmaceuticals and medical supplies to mainly faith based and NGOs although it supplies to a number of private-for-profit facilities. However, they don't stock and distribute contraceptives except moon beads. Through the ADS, the private-not-for-profit facilities are now accessing FP commodities. There are however occasional FP commodity stock outs at NMS, which affects access to FP commodities to the last mile and in the communities.

In the past, family planning was largely the domain of obstetrician-gynaecologists and general doctors and nurses. But today, more family planning services are provided by midwives, nurses, pharmacists and community health workers. This task shifting policy or strategy continues the evolutionary arc of success in task-shifting—that is, making family planning accessible to more clients by enabling more cadres of health workers to provide more methods and services. Allowing Clinical Officers to provide surgical contraception and CHEWs providing injectable contraceptives, improve access to voluntary sexual and reproductive health services (WHO 2017) and can help Uganda achieve FP2030 goals.

6.4.3. Financial commitments

Uganda committed to increase annual budget allocation for FP supplies from US\$3.3 million to US\$5 million for five years; reorganize health financing and develop a health insurance plan for the country; establish voucher programs as a form of demand-side financing; and mobilize an additional USD 5 million from donors. This commitment was re-affirmed at the ICPD@25 in Nairobi, Kenya, to increase financial support towards reproductive health and family planning supplies and commodities to the last mile.

During FY2012/13-2016/17 Government allocated Ushs 8 billion per annum (about US\$2.2 million) to vote 116, which was below the commitment target of US\$3.3 million. In addition, Development Partners contributed about US\$25.5m over the 5-year period from FY2013/14. Uganda also received US\$7m from World Bank/GFF for FP supplies between 2017 and 2021, which was used for Results-Based Financing (RBF). RBF has been successfully used in providing incentives to some facilities to deliver more and better quality RMNCAH services including family planning. RBF was further used to address some of the key constraints such as quality of care, low staff productivity (especially due to absenteeism), mal-distribution of staffing and the challenges of retention, and insufficient coverage of key interventions. Although there was a rise in the financial resources put aside for family planning commodities throughout the planned period from USD 3.6M in 2015 to 10.1 M in 2020, Development Partners have made the biggest contribution. In 2018, international organizations contributed about Shs. 91 billion, representing 61 percent of the total income received (UGX 149 billion).

The National Health Insurance Scheme Bill was passed by Parliament in 2021 but was not assented to by His Excellency the President while the Voucher system for maternal health and FP, managed by Marie Stopes International has faced implementation challenges. This has led to high out of pocket expenditure (over 41%) by the population, limiting access to and use of FP services. The NHIS empowers patients to demand value for their money, increases competition between service providers resulting into improved quality of FP services, is a catalyst to UHC and reduces government expenditure in offering health services including FP. Uganda needs a health insurance scheme that integrates FP services if the majority of the poor people in Uganda are to access universal FP services.

Government has used results-based financing (RBF) to provide incentives to some health facilities to deliver more and better quality RMNCAH services including family planning (RMNCAH Investment Case 2021). RBF has affected FP service provision because health workers are incentivised better with more deliveries conducted. It is important to encourage FP service provision through incentivising health workers especially those who offer FP services (especially LARCs) to couples.

6.4.4. Programme and service delivery commitments

Regarding programme and service delivery, Uganda committed to partner with appropriate private sector bodies and institutions for the integration of FP in MCH and HIV&AIDS information and services for their employees and families; strengthen institutional capacity of public and community-based service delivery points to increase choice and quality of care at all levels (through staff recruitment, train motivation and equipment); support the development and professionalization of midwifery through skills training, good employment practices, and the involvement of midwives in policy dialogue and health management; investing in midwifery career promotion and the bonded midwifery scholarship programs; develop a road-map to finance, train, recruit, retain, and manage performance of skilled human resources for health; roll out youth friendly services in all Government Health Center IVs and district hospitals; strengthen the technical and institutional functionality of Uganda Health Marketing Group and National Medical Stores in a dual public-private RH supplies distribution system; continuous support to the public-private arrangement for increased access to FP services; and scale-up partnerships with CSOs and private sector entities for FP outreach and community-based services to target hard-to-reach communities, and to invest in social marketing and social franchising approaches to ensure access to FP.

Government and partners have reviewed the midwifery curriculum which includes a module on FP and emphasises more practical time than theory and trained more tutors. Both public and private sectors have tried to recruit more midwives while partners continue to build capacity of health workers in offering long-term contraceptives. There is however, low absorption of the trained midwives due to the human resource structure, which has not changed irrespective of population growth over time. Staff ceilings have affected recruitment of the trained midwives and continued long queues have persisted at the health facilities. There are very few health workers with specific training in handling young people, leading to a less youth friendly health facility environment. Many youths fear getting contraceptives from health facilities due to the judgemental attitudes by health workers with no training in offering youth friendly services.

To increase access to FP, Uganda initiated training of national trainers and tutors on Post-partum Family Planning (PPFP) and post-abortion Family Planning (PAFP). PPFP has however not yet contributed to the expected increase in family planning uptake. Implementation of RBF through the GFF support in health facilities has been misinterpreted by some health workers since they are incentivised according to the number of deliveries conducted. This has instead limited the provision of FP services. The Village Health Teams (VHTs) supposed to offer short-term FP services are only active where they are supported by the Implementing Partners.

6.4.5. Uganda's FP2030 commitments

In 2021, Uganda developed FP2030 commitments, with a vision of creating "a population empowered to enjoy their SRH rights for improved quality of life and enhanced productivity". These commitments are to; increase equitable access and voluntary use of modern contraceptive methods for all women and couples; increase funding for adolescent sexual and reproductive health programs; ensure Contraceptive Commodity Security; Strengthen the policy and enabling environment for family planning; strengthen FP data use at all levels; and address family planning myths and misconceptions through evidence-based SBCC and advocacy.

The FP2030 Commitments focus on increasing access to rights-based, voluntary family planning regardless of where someone lives, age, gender, marital status, physical ability, or orientation. FP2030 seeks to maximize contributions by civil society to accelerate progress towards achieving Sustainable Development Goals. FP2030's success requires building strong and sustainable partnerships between governments and civil society organizations (CSOS), strengthening the role of civil society groups in promoting family planning, and holding the government accountable for the commitments made through FP2030. The government has developed the Country Multi-Sectoral Plan for implementing the Commitments. Achievement of these commitments will depend on how Uganda re-organizes the key sectors, since they can only be achieved through a multisectoral approach.

6.5. The family planning financing landscape

Whereas governments are accountable for providing family planning services by allocating and spending most of the funding required for commodities and service provision, Uganda's family planning budget architecture, like in many developing countries is dominated by development partners. This is the main reason why refocusing investments in family planning is crucial for Uganda to realise her family planning commitments and development aspirations.

Development partners support up to at 42%, while Out-of-Pocket (OOP) payments account for 41%. Under the government, FP is predominantly financed through Uganda's health sub-programme under the Human Capital Development Programme of NDP III (HCD PIAP 2021) and contributes a meagre 17%. This means that there are competing priorities within the sub-programme which raises issues for FP financing sustainability. GoU spends about \$11 per person which is a third of the World Health Organization (WHO) recommended \$34 spending benchmark for low-income countries. The fact that several health priorities including FP commodities are largely funded by development partners predicts lack of sustainability and calls for investing better in the FP programme.

In the FY 2021/22, UGX 3.4 trillion was allocated to the health sub-programmer to implement interventions in the NDP III and the health-focused policy documents. This allocation accounted for 8% of the total budget for FY 2021/22 which is slight half of the 15% target as per the Abuja Declaration that Uganda is a signatory to (Abuja Declaration 2015). Over the past decade, the health budget's share of the national budget oscillated between 6% and 9%.

In FY 2020/21, Uganda needed \$29,131,469 for FP, \$33,621,556 for FY 2021/22 while the projected FP commodity need for FY 2022/23 was \$37,508,984. The allocation of resources for FP during three financial years left a funding gap of \$14,257,151 in 2020/21, \$21,708,434 in FY 2021/22 and \$16,722,219 in FY 2022/23. Important to note is the fact that Government contribution has been very low at \$818,039 in FY 2020/21, \$ 0 in FY 2021/22 and \$ 2,752,959 in FY 2022/23.

Table 6.1 Projected FP commodities need FY2020/21 – FY2024/25 in USD

FP Commodity	FY 2020/21	FY 2021/22	FY 2022/23	FY2023/24	FY2024/25
Pills	773,391	830,526	802,762	852,149	903,791
Injectables	4,420,232	4,746,789	4,372,712	4,641,727	4,923,029
IUDs	201,489	241,787	290,145	348,173	417,808
Implants	8,428,013	10,212,648	12,395,086	15,067,524	18,344,123
Emergency contraceptives	507,205	540,249	1,463,664	1,551,950	1,644,241
Cycle beads	100,478	107,901	99,056	105,150	111,523
Male condoms	6,769,224	7,791,496	7,903,766	7,324,149	8,105,837
Female condoms	1,208,790	1,391,339	1,525,874	1,431,561	1,581,146
Total commodities costs	22,408,822	25,862,735	28,853,065	31,322,383	36,031,497
PSM costs 30%	6,722,647	7,758,821	8,655,919	9,396,715	10,809,449
Total cost (USD)	\$29,131,469	\$33,621,556	\$37,508,984	\$40,719,097	\$46,840,946

Source: Ministry of Health Pharmacy Division

Figure 6.1 Allocations for FP commodities FY2020/21 to FY2022/23 in USD

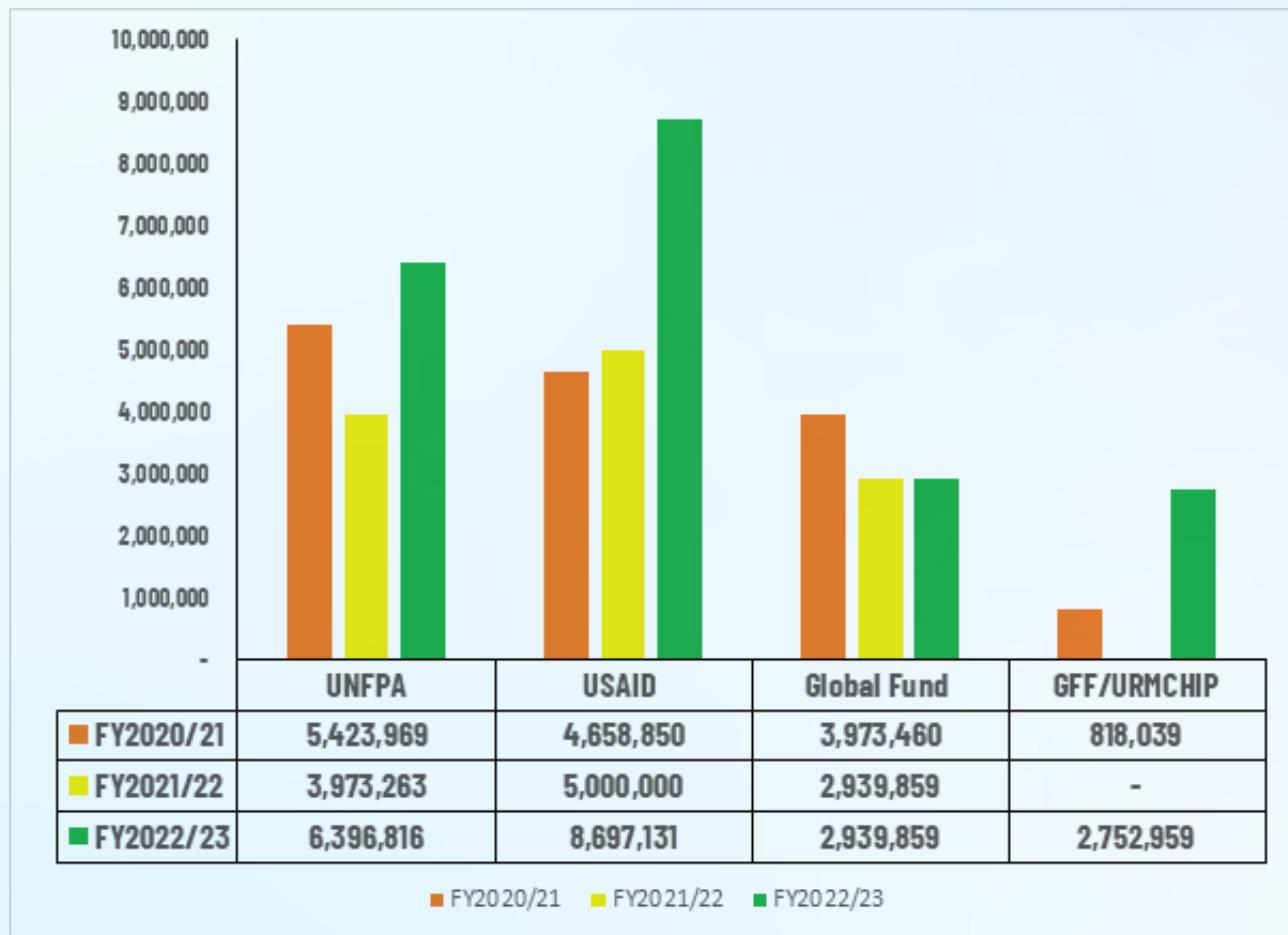


Table 6.2 Funding gap for FP commodities FY2020/21 to FY2022/23 (USD)

	FY 2020/21	FY 2021/22	FY 2022/23
National FP commodities need	\$29,131,469	\$33,621,556	\$37,508,984
UNFPA	5,423,969	3,973,263	6,396,816
USAID	4,658,850	5,000,000	8,697,131
Global Fund	3,973,460	2,939,859	2,939,859
Global Financing Facility/ GoU	818,039	0	2,752,959
Total contribution	14,874,318	11,913,122	20,786,765
Funding gap (USD)	14,257,151	21,708,434	16,722,219

Source: Ministry of Health Pharmacy Division

6.6. Initiatives to improve the family planning funding situation

Different initiatives have been undertaken to increase investments for family planning, but they have not yielded the expected targets. Even though the country failed to achieve the FP2020 Commitments, there is yet another opportunity to re-strategize and put in place necessary frameworks to meet the new targets in the FP2030 Commitments and the second Family Planning Costed Implementation Plan. This calls for government to refocus the family planning investments, including the policy environment and the FP financing landscape. This would go a long way in serving majority of the population.

6.6.1. Policy development and implementation

The Government has invested in policy development, including development of national FP CIPs (2014/15-2019/20 and 2020/21-2024/25) that provide an overarching framework for addressing FP services in the country. Government approved the National Sexuality Education Framework 2018, but it has not been implemented, even after government commitment to operationalize it in the ICPD@25 commitments in Nairobi. The Sexuality Education framework for the out of school youth has not been implemented either. This hinders access to and utilization of FP services by adolescents. Policy implementation would attract resources.

The National Health Insurance Scheme Bill was approved by Parliament in 2021. The National Health Insurance Scheme was designed as a health financing system to pool resources and provide access to quality affordable personal health services for all Ugandans based on their health needs. This was meant to be mandatory for all Ugandans and contributions were to be made directly or indirectly which was to boost coverage. This would reduce the high out-of-pocket expenditure (at 38.3%) in 2019 (MoH 2019). The Parliament of Uganda passed the National Health Insurance scheme Bill into a law in 2021. The Bill had pre-set packages including family planning counselling and services. The Bill is meant to allow insured clients to receive information and services in both the public and private sectors, increasing the accountability for providers to offer competitive and high-quality services. Unfortunately, the Bill was not accented to by His Excellency the President as expected. This remains a missed opportunity for FP financing in Uganda.

6.6.2. Multi-sectoral collaboration for FP

Uganda has established the National coalition of champions and advocates which has worked with several stakeholders to focus FP advocacy; developed the Family Planning Social Behavioral Communication Strategy (2016- 2021), adopted the National Strategy for Male involvement/participation in Reproductive health, Maternal, Child, Adolescent Health and Rights- Nutrition including HIV/TB.

The NDP III, under the Human Capital Development Programme is coordinating integration of FP in interventions of key actors like MoES, MoLG, MoGLSD and MoWE. Under the coordination of National Planning Authority with support from National Population Council, the USAID/Uganda Family Planning Activity has supported the integration of FP in the plans of these ministries. These have already nominated FP focal persons and developed draft FP action plans for integration in their plans. Appreciation of FP by these key actors will increase resource allocation for FP at programme level.

6.6.3. Tracking family planning financing

Given the insufficient and minimal domestic family planning budgets compared to the total funding needed to deliver quality programs and care, especially in comparison to donor funding investment for family planning and supplies, civil society organizations have supported family planning budgets tracking/ monitoring to hold government accountable for increasing family planning investments and ensure that allocated funds are properly disbursed and spent. Family planning budget tracking and analysis rely on the availability of data on family planning allocations, disbursements and expenditures. Budget tracking has provided the evidence to hold policy and decision-makers accountable for the family planning financing shortfall.

6.6.4. Advance Family Planning initiative

Advance Family Planning (AFP) is an advocacy initiative launched in Uganda in 2009, with a view to realizing the FP2020 (now FP2030) commitments (John Hopkins Bloomberg School of Public Health, 2020). AFP through a unique SMART advocacy approach aimed to increase financial investments and political commitment to ensure that the country's FP commitments are met, as well as to track progress and understand advocacy priorities so that all women and girls, regardless of where they live, access quality voluntary family planning. AFP partners in Uganda collaborating with government at national and Local Government levels and donors; have since 2009 advocated for domestic financing and a conducive environment for family planning. As such, AFP has been part and at the centre of several milestones that have improved the family planning/SRHR visibility, policy and funding environment at national and local government levels (PPD ARO 2022).

AFP initiative has contributed to several quick advocacy wins which have improved domestic and external financing availability and access to family planning commodities and services. Some of the AFP achievements are: National Medical Stores allowed private not-for-profit (PNFP) FP providers to access contraceptive supplies (MoH 2022 valuation of FPCIP); in 2012, MoFPED waived taxes on contraceptives to increase procurement stocks and contribute to Universal Health Care (UHC); National Drug Authority registered Norigynon on the National Medicines List to increase the FP method mix. This would ultimately ensure the availability of more FP commodities and boost informed consent. Targeted initiatives like AFP will lead to increased access to FP services.

6.6.5. Family Planning in Local Governments

For a long time, efforts to improve the family planning environment were limited to the national level and little attention was given to how commitments/achievements made at the national level could trickle down to the district level to improve access to FP information and services. Cognisant of the role districts play in planning, implementing, and monitoring family planning programs and service delivery, Implementing Partners embarked on a strategy of engaging local government leaders to prioritise family planning in their plans and budgets. Since that time, Partners have engaged local leaders to appreciate the relationship between FP and socioeconomic development. Leaders have been supported to establish multi-sectoral FP Advocacy Working Groups to lobby for FP budget lines within the LG Plans and budgets. Several LGs have been supported to revitalise FP programmes, thus generating increased funding for FP, creating family planning visibility and improving policy commitments at the LG level. Increasingly, LGs have been willing to allocate funds to FP and some of them integrated FP interventions in the Development Plans, which helped to lobby and attract more funding from various partners. More partners, state and non-state actors have supported LGs to develop Family Planning Costed Implemented Plans (FP CIPs) based on the local contexts.

As of 2020, 56 LGs had developed FP CIPs (UFPC 2020). This is, however, low coverage considering that there are over 175 local governments. As a result, some LGs have allocated financial resources to FP to match the FP budgets with national FP commitments, but release and expenditure of what has been committed does not often happen.

There are still gaps with implementation of the developed district FP CIPs. There are still political, religious and cultural leaders who are opposed to FP. Resource allocation to FP interventions is still inadequate, there are challenges of multisectoral coordination, with non-health sectors failing to allocate resources for FP and inadequate use of data in planning. In order to take advantage of the district specific documents, there is need to address these barriers to FP CIP implementation.

6.6.6. The Motion Tracker

The Motion Tracker is an online civil society-led approach developed by the Ugandan Civil Society Organization, Samasha to strengthen accountability for the SRH/FP commitments. Through the Motion Tracker, Samasha provides a framework through which government agencies and partners report and provide feedback on the investments in SRH/family planning. This has helped to check the investments, and strengthen accountability while fostering partner participation, engagement and ownership to address bottlenecks to achieving commitments. It also offers transparent agreement on the performance of the commitments and the action required to meet them. The motion tracker depends on data, which is not always readily available. To benefit from the motion tracker, it is important to provide timely accurate data on FP allocations, releases and expenditure.

6.6.7. The Global Financing Facility (GFF) and Results-Based Financing

The GFF has mobilized government commitments to fund family planning programs. Implemented through budgetary allocations that support Results Based Financing (RBF), the financing facility incorporated family planning services but due to challenges with monitoring real-time government spending, there has been little progress in tracking whether such allocations are adequately spent. There is need for sustained advocacy to ensure that the GFF funds are efficiently utilized at the facilities. While the Government has been allocating some resources for FP under the GFF, the project is coming to an end, which is likely to increase the funding gap for FP.

6.6.8. Family planning for younger people

Government committed to allocate 10% of the MCH budget for adolescent FP in the FP2020 Commitments. Government together with partners have put in place deliberate investments in FP for adolescents and young people. However, FP services for this population have not been prioritized, as evidenced by increasing teenage pregnancies and child marriages. This is because the GoU commitment to increasing funding for adolescent sexual and reproductive health programs has not been reflected in resource allocation for vital adolescent programming and policy implementation. Considering Uganda's demographics, financial resources are vital for adolescent programming and policy implementation. Focused allocation and expenditure on adolescent high impact practices stipulated in the National FP CIP II and School Health and Adolescent Health Policy need to be implemented.

While the GoU has ratified a myriad of human rights instruments that include covenants, treaties, charters and made a number of commitments under various regional and global processes, these have not been actualised. Strategies to implement these national documents will improve adolescent access to FP information and services. This will address issues like high teenage pregnancy rates. Uganda needs to use the population age data to guide design and implementation of FP programmes if young people are to embrace FP.

6.7. Opportunities for refocusing FP Investments

6.7.1. Multi sectoral collaboration

Multi-sectoral collaboration through the Human Capital Development Program is one way of leveraging government financing to support the national FP agenda. Establish multi-sectoral Family Planning working groups (composed of technical people, politicians, religious and cultural leaders) to tap on different expertise and mandates during advocacy. The MoLG has instructed Accounting Officers to prioritize family planning in the development plans and budgets come 2023/24.

6.7.2. Family Planning budget and expenditure tracking

Family Planning partners should support the annual tracking of allocations, disbursements and expenditures particularly for domestic funds to inform advocacy and accountability for FP commodities financing. More specifically, CSOs should start by assessing performance on the instruction from the PS by the end of the third quarter of FY2022/23.

6.7.3. AFP SMART Advocacy

Cascade AFP SMART Advocacy among more civil society partners and fast track FP budget and expenditure data and analysis to hold policy and decision-makers accountable for the family planning financing shortfalls to further improve FP domestic and external financing.

6.7.4. Total Market Approach

Expand the range of contraceptives through Total Market Approach and reach out to the vulnerable and most marginalized communities. This will address the rampant regional inequalities in family planning acceptance and utilization.

6.7.5. Innovative financing

Tapping into the Results Based Financing stream of the GFF and aligning such investments with monitoring quality of family planning services while engaging the Health Unit Management Committees (HUMCs) will help check satisfaction of communities to meeting their family planning needs.

The Health Insurance Scheme Bill was cognisant of family planning, despite not being accented to by the President. Partners and CSOs should continue engaging MoH in the dialogues to fast track the NHIS.

6.7.6. Targeted Community Mobilization and mind set change

Changing individual/ community mindsets to family planning and reforming family planning service delivery systems is paramount but also difficult and a slow process, which requires continuous messaging to emphasise the issues for the right mindset. Targeted community dialogues with men will help identify alternatives to negative social norms and practices that hinder family planning use. Focusing on building capacity of the media houses to channel the right information on FP and using different social media apps that would mainly attract young people would increase awareness and demystify the myths and misconceptions of family planning in the communities.

Targeted investments in mobilizing communities would also employ Champions of family planning; the key community gate keepers including religious, cultural leaders; and the community health workers/ Village Health Teams (VHTs).

6.7.7. Community based Distribution

Family planning community-based distribution is a high impact practice, which however, has limited coverage mainly because it has been supported by partners and is not integrated in other community health services. In order to be more effective in contributing to the FP commitments, there is need to increase the coverage of VHTs across the country and implement family planning integrated FP outreaches especially in the hard-to-reach areas. Design policies and programs responsive to the marked inequalities in FP access and uptake. This is because the demand for children is generally higher among the poor, as noted in the literature review above. Regional specific concerns should be considered during the design of such programmes. Family planning programs should therefore, reach women in rural areas where high levels of unmet need persist. Programs need to target the Northern and Eastern regions of the country where levels of unmet need remain high and have continued to increase throughout the past decade.

6.7.8. Adolescent family planning

Increasing family planning use among adolescents calls for strengthening capacity of health workers towards a positive attitude that adolescents are sexually active and not ready for the unplanned pregnancies. There is also the need to strengthen linkages between schools, livelihood programmes and health facilities to ease access to ASRH services.

6.7.9. Digitalizing family planning

There has been a shift to digitalizing health through m-health apps. A study "Using Telehealth Services to Support the Continuity of Family Planning Information, Access, and Utilisation during the COVID-19 Pandemic in Uganda" (Open Aces Journal for contraception 2021) revealed the benefits of investing in technology to improve family planning information, communication and service delivery. More studies have also showed how using mobile apps would improve access to real-time data and analysis, health workers' supervision and enhance training of health workers (through diffusion mechanisms. The m-health digital platforms could also be adopted in tracking family planning budget and expenditure data, which remains a major challenge in the financing discourse for family planning.

6.7.10. Human Rights Based Approach to family planning

The FP2030 Commitments have been strong in focusing countries to build the critical knowledge base on rights-based family planning, in order to get communities to demand for their family planning rights in a holistic approach. Through the rights based approach there would be more justice and ability to challenge for ensuring the family planning rights, and the impunity of governments and individuals in failing to protect them.

6.8. Conclusion

Family planning is a human right and programs should be aimed at ensuring that they meet the national FP commitments towards improving access and acceptability of FP in the country. There is an optimistic ray of hope for Uganda to achieve the FP2030 targets. However, there must be a deliberate and sustained effort by Government to make more investments in family planning. Inadequate financing for FP means the right to family planning is denied. Since FP is enshrined in the right to health in the Constitution of Uganda, there is a strong need to ensure universal access to FP and support the paradigm of leaving no one behind. Investing in economic reforms, without investing in family planning and education means Uganda will not meet its target of a per capita income of \$9,500 by 2040.

6.9. Recommendations

Government has committed to a dedicated FP budget line through the FP2030. to the Government should track spending on family planning commodities and influence budget allocation for reproductive health commodities to focus more on the cost-effective method mix as well as focused allocation and expenditure on adolescent /youth high-impact practices such as the District Committees on Adolescent Health (DCAH) that provide information and counselling to

adolescents and young people. Government must make deliberate efforts to prevent teenage pregnancies and promote FP uptake for the young girls who are sexually active. This will be done through creating enabling environment to access FP services and commodities allocation and expenditure data.

At programme level, Implementation by LGs and implementing partners has yielded many results, which the central government can leverage on. The LGs should be supported to develop FP CIPs and resources allocated to finance interventions in the LG FP CIPs. To ensure this happens, there is need to emphasize prioritization and refocusing funding for FP in the Budget Call Circulars. There is need to refocus financing towards increasing awareness and mobilization of communities as well as fostering youth led innovations on benefits of LARCs.

There is need to work with District leaders, religious and cultural leaders to promote access to comprehensive sexuality education. There should be no conflict between faith and human rights. The district leadership should be trained on the use of the ImpactNow model to aid planning and budgeting processes for prioritization of family planning- especially the use of modern contraceptives.

Government should invest in the National Health Insurance Scheme (NHIS) to address the needs of vulnerable categories of the population. The NHIS will help implement programs responsive to the marked inequalities in FP access and uptake. This is because the demand for children is generally higher among the poor, unemployed less educated rural people, and urban poor.

To reduce the unmet need for FP and increase mCPR, FP should be looked at as a developmental, not a health issue. This calls for a multi-sectoral approach to addressing fertility concerns and increasing access to quality comprehensive FP information and services by women and men of reproductive age. The Human Capital Development Programme and the Parish Development Model offer opportunities for investment in advancing the multi-sectoral approach, changing mindsets of communities to FP and improving the delivery of services.

Government should deliberate efforts to design, approve and implement policies and strategies that prioritize FP provision to young people. This will help address teenage pregnancy and high fertility, bearing in mind Uganda's demographics. These policies and strategies will help empower women and increase contraceptive use since they increase access to information and FP services.

Uganda should develop a monitoring framework for the FP2030 commitments, and annually track progress towards achieving them. The monitoring framework should guide resource allocation and recommend the design of strategies and interventions that will help achieve the FP2030 goals. Periodic changes should be made to the framework to ensure it is serving the purpose.

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7.0. Introduction

Poor and vulnerable people mostly live in rural areas, have large families and derive their income predominantly from agriculture. While agriculture sector growth has reduced poverty, the gains are fragile (World Bank Group, 2016). For every gain in poverty reduction, an equal number of people fall into poverty, illustrating the fragility of the gains realized by the poorest households (*ibid*). One in four rural Ugandans lives in poverty compared to just one in ten urban Ugandans (*ibid*). As a result, households are increasingly migrating to urban areas. According to the 2019/20 Uganda National Household Survey (UNHS), 11.6 percent of migration was from rural to urban areas, while 28.2 percent of migration was from one urban to another urban place (UBOS 2021). More females (18 percent) than males (14 percent) had migrated during the reference period. Most migrants (64 percent) are youthful i.e. those above 18 but below 35 years.

Ugandans are increasingly migrating to be part of the opportunities that exist in the urban area. Overall, 24.3 percent of migrants moved for employment or self-employment reasons, while 29.5 percent moved to follow or join their family (*ibid*). More than two in every five individuals (20.6 percent) migrated for marriage. Disaggregation of reasons for migrating by sex indicates that males were twice as likely to migrate for employment or self-employment reasons (59 percent) than their female counterparts (27 percent) (*ibid*). According to the 2014 Uganda National Population and Housing Census (UNPHC), the majority (47 percent) of those who migrated to seek employment or self-employment were youth (UBOS, 2016).

7.1. Problem Statement

Ugandan urban areas are progressively facing pressure from increased migration and the attendant demand for public services, infrastructure and employment. One of the significant challenges to the host urban areas is housing provision to both existing and migrant populations. The pressure of rural-to-urban and urban-to-urban migration on Uganda's areas ability to accommodate the extra population is increasing rapidly. Thus, there is a widening deficit of housing, estimated at 2.4 million units, growing by 200,000 units a year (UBOS, 2021).

Evidence from other jurisdictions indicates that the increasing drift of the rural populace to the urban areas has overstretched the infrastructure such as electricity, health facilities, educational and recreational facilities, motorable roads, and pipe-borne water among others (Ellis & Harris, 2004). In addition, household waste and human-generated wastes flow directly or indirectly into low-lying lands, open spaces or water bodies, thus worsening the pre-existing environmental and health risk.

The migration of people into urban areas is also associated with worsening income inequality. The incidence of urban poverty resulting from rapid urban growth is proportional to the share of slum dwellers in cities who live below the poverty line. Most migrants are employed in the informal sector, which offers fewer monetary benefits than the formal sector. To cope, most migrants adopt unconventional means of livelihood like smuggling, begging, drug trafficking, trafficking of women and prostitution (Nasir & Pervin, 1997). In this case, the rising population density could pose a challenge unless urbanization is deliberately planned (World Bank Group, 2020). Uganda's population density is comparable to that of Western Europe and China and is growing rapidly (*ibid*). This may exacerbate poverty and social tensions unless a larger number of people migrate from rural to urban areas (*ibid*).

7.2. Objectives

One way to “refocus investments to attain a favourable population age structure for sustainable development” is to create employment, provide infrastructure and promote the integration of internal migrants in response to rapid urbanization. Therefore, this study explores the motives of migration, the extent and speed by which migrants obtain employment in destination urban areas; the extent of access to services; and the quantity and quality of economic integration of the migrant population. The most significant contribution of this paper is that it compares the effects of internal migration and demographic change between three groups: rural-urban migrants; urban-urban migrants and non-migrants.

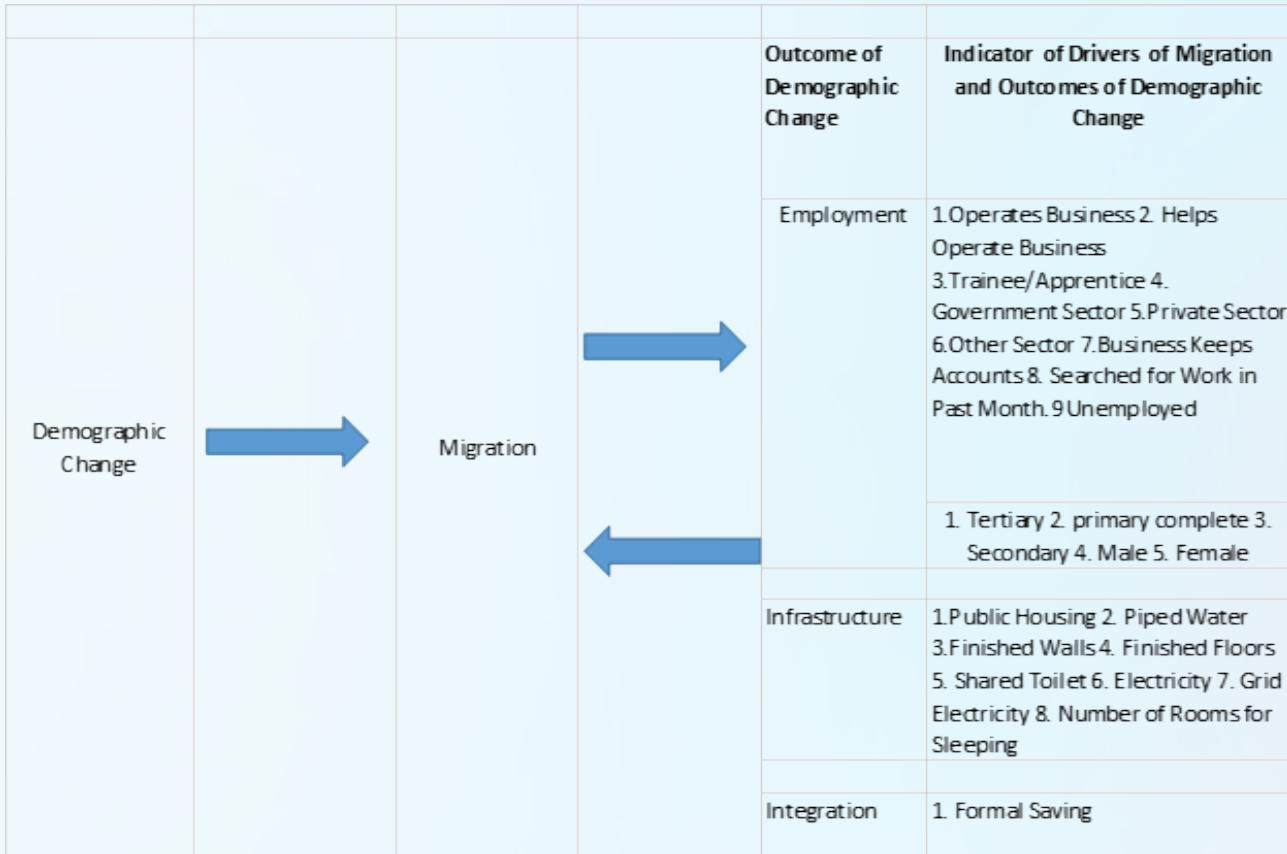
7.3. Methods

7.3.1. Study design

Demographic Change is described as the changes in population size and structure caused by changes in birth rates, death rates, and migration. Meanwhile, migration is understood as the movement from rural to urban areas, and from one urban area to another urban area. Urban areas, as defined by UBOS (2016), are areas gazetted as City, Municipality, Town Council or Town Board as of March 2016 (UBOS, 2016). In March 2016, there were 259 urban centres in Uganda (*ibid*). These include one Capital City, 33 Municipalities, 163 Town Councils and 62 Town Boards. It is noted that the scope of this study is limited to internal migration. Internal migration is a significant force redistributing the population during development as the sectoral composition of the economy and the geographic distribution of employment change (Kuznets, 1966). This has a variety of implications for the evaluation of population policies.

Figure 7.1 is derived from the vast literature on migration and demographic change, including Ellis & Harris (2004), which suggests that demographic change drives migration. Meanwhile, the quest and the need for employment and infrastructure also drives migration and is an outcome of migration and demographic change. Consequently, after people have migrated, they want to integrate with the host communities. To understand employment as a driver of migration; and as an outcome of both migration and demographic change, indicators that proxy employment such as Operates Business, Helps Operate Business, Trainee/Apprentice, Government Sector, Private Sector, Other Sector, Business Keeps Accounts, and Searched for Work in the Past. The paper also uses determinants of employment in this case the level of education such as Tertiary, Primary complete, Secondary complete, and the gender of the household member (Male and Female). Regarding infrastructure, the same explanation follows that the search for infrastructure is a driver of migration and an outcome of demographic change. The paper uses housing indicators to show the extent of access to infrastructure. These are Public Housing, Piped Water, Finished Walls, Finished Floors, Shared Toilets, Electricity, Grid Electricity and a Number of Rooms for Sleeping. The same explanation follows for integration. However, the data on indicators of integration both as a driver of migration and an outcome of demographic change was limited to formal savings.

Figure 7.1: Conceptual Framework



Source: Authors own construction

7.3.2. Data

This study uses two sources of data: the Uganda National Household Survey (UNHS) 2019/20 and the World Bank Development Indicators (WDI) to conduct the analysis.

7.3.3. Data analysis methods

This study triangulates three methods: Firstly, the study reviews the extant literature on migration and demographic change. Secondly, the study conducted a descriptive statistics analysis to compare the differences between the three (3) types of migrants: urban-urban; rural-urban migrants; and non-migrants. The differences compared concern: motivation for migration; success in finding employment and the ability to access infrastructure and to integrate. In addition, the study compares the changes in the rates of urban population growth, female labour force participation, mortality and fertility rates, and age dependency ratio over time. Lastly, the study uses a probit regression methodology to probe the effects of determinants of access to employment, infrastructure and integration.

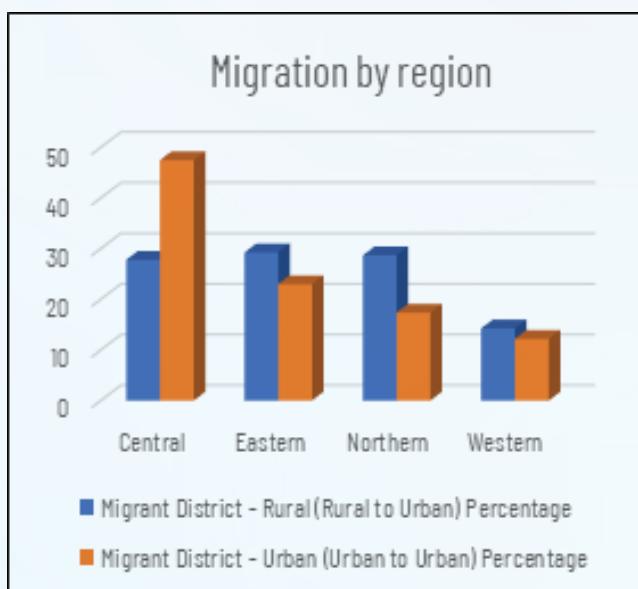
7.4. Results

7.4.1. Motives of migration by region

About 5,592,595 people migrated to urban areas in Uganda as shown in Table 7.1 below. Most of the migration happened in the central region (2,003,058) followed by the eastern region (1,493,439). This is an indicator of increased urbanization, which occurs in synergy with the demographic transition.

Table 7.1: Migration by region

Region	Rural to Urban	Urban to Urban	Total
Central	921,791	1,081,267	2,003,058
Eastern	969,735	523,704	1,493,439
Northern	950,674	395,419	1,346,093
Western	472,050	277,955	750,005
Total	3,314,250	2,278,345	5,592,595

Figure 7.2: Migration by region, %

Source: Authors' construction using UNHS 2019/20

Source: Authors' construction using UNHS 2019/20

However, a disaggregation of results in Table 7.1 suggests that most migrants move from rural to urban areas (3,314,250). Figure 7.2 suggests that among the rural-urban migrants, 30% are from the eastern region (969,735) followed by 29 % from the northern region (950,674). The central region explains 48% of urban-urban migrants (1,081,267); while the western region has the least, 12% of urban-urban migrants (277,955). This suggests that the eastern and the northern region are still mostly rural. This pattern is consistent with the large and increasing regional variations in poverty, which is rural; and northern and eastern Uganda phenomenon (Ssewanyana & Kasirye, 2012).

The northern and the eastern regions were the poorest regions both in terms of absolute numbers (3 and 2.8 million persons, respectively) and by percentage share of the population (35.9 and 25.9%) in the 2019/20 survey (UBOS, 2021). This may explain why almost half of the migrants from the northern (45.15%) and eastern (32.46%) regions follow/join a family member to seek assistance and escape economic deprivation (Table 7.2). The northern and eastern regions are vulnerable to climate change due to significant land degradation, which may exacerbate poverty (World Bank Group, 2020).

However, migrating to follow or join a family member is invariably the main driver of migration in other regions, although with less intensity in the central and western regions (Table 7.2). Equally, people in the central (25.32%) and western (17.57%) are more likely to migrate to look for work than their counterparts from the northern and eastern regions. This suggests that there is spatial inequality in the reason advanced for migrating with northern and eastern regions less likely to migrate for economic activities. In the Northern region, particularly the Acholi region, most people migrate from the rural to the urban areas because of family disputes and in search of economic opportunities (Secure livelihoods Research Consortium, 2018). In the areas of Karamoja, the key reason for migration is livelihood diversification (Stites, Burns, & Akabwa, 2014). A study by Wakhata (2018) noted that migrants move to Bunyafwa, located in the Eastern region, in search of abundant land and fertile soils.

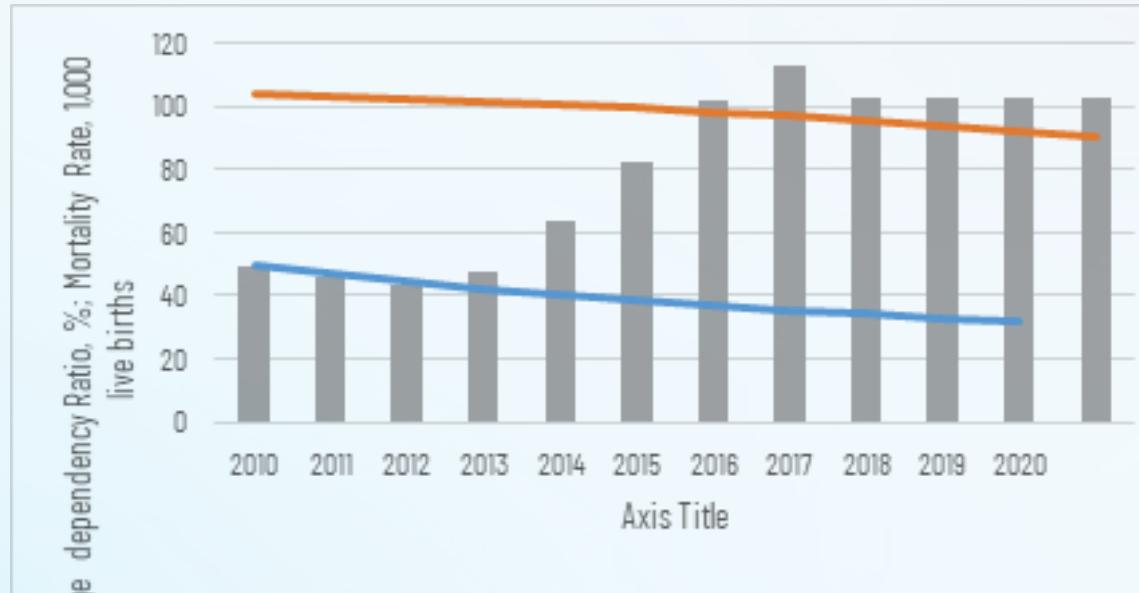
Table 7.2: Motives for migration

Motives	Central (%)	Eastern (%)	Northern (%)	Western (%)	Overall (%)
To look for work	25.32	14.69	6.51	22.48	17.57
Other income reasons	7.75	5.08	6.19	7.60	6.64
Drought	0.00	0.13	0.00	0.00	0.04
Land eviction	0.23	0.00	0.00	2.11	0.37
Other land-related problems	1.60	1.40	1.84	7.61	2.41
Health-related problems	2.94	1.92	0.93	0.07	1.80
Disability	0.00	0.17	0.14	0.00	0.08
Education	5.19	10.06	11.68	3.71	7.85
Marriage	11.35	21.14	16.93	14.33	15.71
Divorce	3.45	3.60	3.68	6.86	4.00
To escape insecurity	1.06	0.61	1.55	0.00	0.92
To return home from displacement	0.17	1.02	1.16	0.95	0.74
Abduction	0.00	0.00	0.00	0.00	0.00
Follow/join family member	30.12	32.46	45.15	22.85	33.39
Other	10.82	7.70	4.26	11.44	8.49
	100.00	100.00	100.00	100.00	100.00

Source: Authors' construction using UNHS 2019/20

From Table 7.2 we can conclude that, largely, people migrate to search for a better life. Indeed, the literature suggests that migration has many benefits such as a reduction in fertility. For example, Jensen & Ahlburg (2004) found that large fertility and dependency declines accompany post-migration employment in the Philippines. Liang, Yi, & Sun (2014) found that even with a pre-existing birth control policy, migration had significant impacts on fertility. Figure 7.3, tries to establish whether that is the case for Uganda. Figure 7.3 suggests that the urbanization growth rate accelerated from 5% in 2010 to 7% in 2020. Indeed, the acceleration in urbanization is matched by a decrease in mortality rate from 50 to 32 of 1000 live births in the same period. This is probably because urban areas have better hospitals and healthcare infrastructure. In addition, the working-age population has increased considerably as shown by the deceleration of the dependency ratio from 103 % of the working-age population to 91%. This is related to the high supply of wage employment in urban areas.

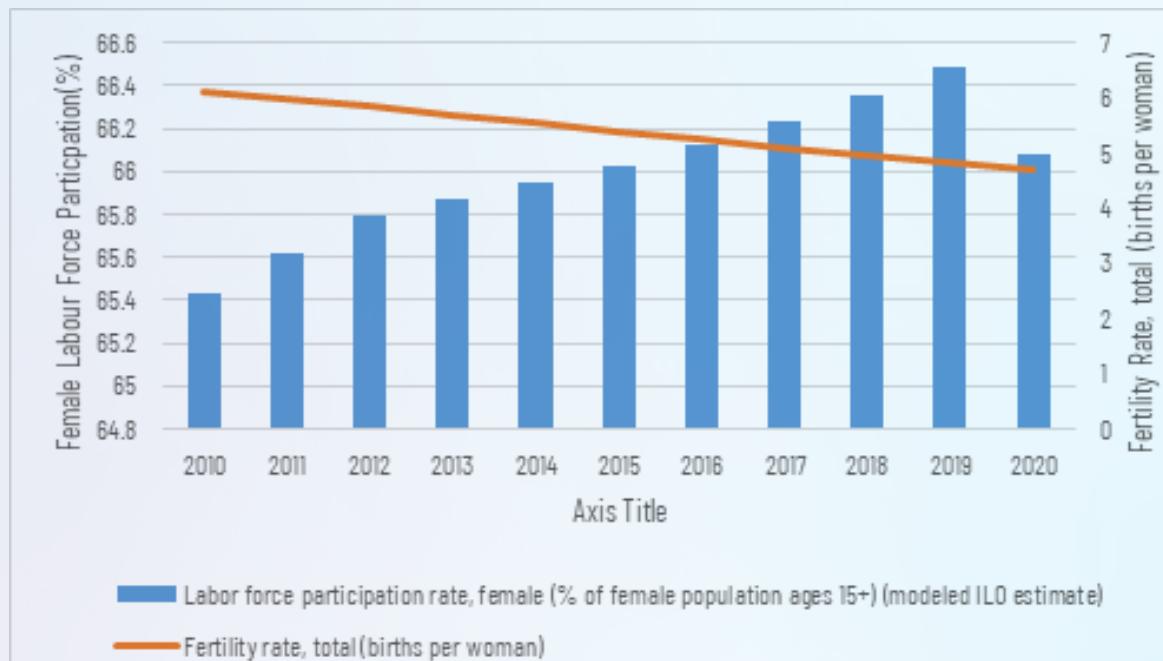
Figure 7.3: Evolution of Urbanization, Mortality rate and Age dependency in Uganda



Source: Authors' construction using the World Bank Development Indicators (WDI) Data

Meanwhile, Figure 7.4 suggests that migration to urban areas is mainly due to the pursuit of better and higher-wage jobs. Migrants to urban areas tend to have fewer children; which suggests that urbanization has a negative effect on fertility rates. Fertility has fallen from 6.1 to 4.7 births per woman between 2010 and 2020. Urbanization is associated with low fertility, in part because of increased female labour participation and access to education for women as well as later marriage and motherhood (Mitra, 2019). Figure 7.4 suggests that the female labour participation rate stabilized at above 60 % of the female population ages 15 and over. There is a 1 percentage point reduction in female labour participation in 2020. This is likely due to the impacts of COVID-19 on labour participation. Given that urban jobs are on average more productive, an increase in urbanization amplifies the magnitude of the demographic dividend (*ibid*).

Figure 7.4: Relationship between Female Labor Participation and Fertility Rates in Uganda



Source: Authors' construction using the World Bank Development Indicators (WDI) Data

7.4.2. Employment as Motive for Migration

A significant proportion of people migrate to seek increasing non-farm self-employment. Rural-to-urban migration is seen as a necessary component for economic development as it may be linked to a shift out of agriculture to the manufacturing and service sectors.

Table 7.3 below shows comparisons of employment variables between rural-urban migrants and other groups; and urban-urban migrants and other groups. In comparison to other groups, rural-urban migrants tend to be disadvantaged (Table 7.3). Rural-Urban migrants tend to help operate a business, to be involved in the search for work in the past month and are largely unemployed more than their counterparts, and the differences are statistically significant at the 1 percent level (Table 7.3). This is consistent with the evidence that suggests that most rural-urban migrants have transitioned into self-employment, in the informal sector, to supplement their incomes.

On the other hand, urban-urban migrants are more likely to operate a business, work in the government and private sector, and keep business accounts more than their counterparts, and the differences are significant at the 1 percent level. There are no significant differences between rural-urban and urban-urban migrants when it comes to unemployment. Sprouse & Ames (1976) noted that rural-urban migrants found it difficult to get employment because they have no experience working urban jobs. They were formerly farmers and agricultural labourers whose skills are low and do not fit the skilled urban labour market.

This evidence suggests that reducing dependence on the agricultural sector will require raising non-farm incomes, which is currently significant for only urban-urban migrants, (Table 7.3). Non-farm income may in turn boost private sector competitiveness. However, formally registered firms are small with as many as two-thirds having sole proprietorship legal status (Lakuma, Marty, & Muhumuza, 2019). The formal sector provides 19 percent of all jobs; large firms create 12 percent of the jobs in the formal sector, while MSMEs employ over 2.5 million in various sectors (*ibid*).

Therefore, the vast majority of businesses that accommodate rural-urban migrants are in “other sectors” (Table 7.3). “Other sectors” are synonymous with informality, which are small and engaged in low value-addition activities. Uganda’s private sector is predominantly informal and has low labour productivity (*ibid*). Relatedly, the survival rate of informal firms is two years due to a myriad of challenges: poor management, ethics and planning, and lack of access to information and business finance to sustain and grow their businesses (*ibid*). Relatedly, more than 80 percent of Uganda’s private sector are MSMEs contributing 75 percent of the total GDP (*ibid*). Jobs in MSMEs are usually in low labour productivity areas, generating little remuneration (*ibid*)

In addition, informal employment accounts for more than 90 percent of youth employed in non-farm enterprises (Lakuma, Marty, & Kuteesa, 2016). Youth unemployment and a relatively high unskilled labour force pose a serious development challenge (*ibid*). Almost two-thirds of Uganda’s unemployed are the youth with a significant majority being engaged in subsistence agriculture as family workers with no wages accruing to them (*ibid*). Youth unemployment and underemployment is explained by an inadequate supply of jobs and insufficient employable skills among other reasons; of the country’s total workforce, only 64 percent have completed primary school and 5 percent a vocational training course (UBOS, 2016a).

Table 7.3: Employment Comparisons between migration types

Employment	Rural-Urban	Urban-Urban
Operates Business	0.10	0.17***
Helps Operate Business	0.02***	0.02
Trainee/Apprentice	0.00	0.00
Government Sector	0.04	0.10***
Private Sector	0.91	0.88***
Other Sector	0.04*	0.02
Business Keeps Accounts	0.13	0.22***
Searched for Work in Past Month	0.13***	0.24
Unemployed	0.04***	0.05***

Note: ***, ** and * indicate significance levels of 1%, 5% and 10%, respectively.

Source: Authors' own computations using UNHS, 2019.

A probit regression of unemployment status was run for each of the 4 groups: All individuals, rural-urban migrants, urban-urban migrants and non-migrants. The results are shown below in Table 7.4. Table 7.4 suggests that the transition to wage employment favours males and tertiary educated urban – urban migrants. Table 7.4 also suggests that with their lower levels of education and rural-urban status, women benefit less than men from wage employment. Female heads of households earn 28 percent less than their male counterparts (World Bank Group, 2021). Women dominate the informal sector. More than 50 percent of women work in the agriculture sector; notwithstanding that their productivity in the sector is lower than that of men (*ibid*). Cultural barriers and the existing land tenure system limit access to land for women, and when employed in commercial farms and estates, women are unlikely to be managers (*ibid*). It should be noted that gender gaps are multi-dimensional and lower education and cultural norms and perceptions about women widen the gender differences in the labour force. The percentage of women-headed businesses is 26 percent, much lower than the average of 36 percent for Sub-Saharan Africa (*ibid*).

In addition, Table 7.4 suggests that there is no advantage to being male and less educated non-migrants. In addition, causes of youth unemployment and underemployment are not limited to the inadequate supply of jobs; but also, to inadequate employable skills; of the country's total workforce. However, access to public services such as schools has been particularly lacking for poor households, especially in the northern and eastern parts of the country (World Bank Group, 2016). The disadvantaged in society depends on public healthcare and education much more than the rich (*ibid*). However, the quality of such services is low in the north as a result of conflicts and an influx of refugees from neighbouring countries. This has resulted in poorer education and health outcomes and lower living standards, and inter-generational transmission of poverty (*ibid*).

Table 7.4: Probit regression of unemployment status

	(1) All	(2) Rural-Urban	(3) Urban-Urban	(4) Non-Migrants
VARIABLES	Unemployed	Unemployed	Unemployed	Unemployed
Male (Base: Female)	0.16*** (0.03)	0.17 (0.18)	-0.15 (0.17)	0.18*** (0.03)
Primary complete (Base: Tertiary complete)	0.09*** (0.03)	0.03 (0.17)	0.40* (0.23)	0.08** (0.03)
Secondary complete (Base: Tertiary complete)	0.13*** (0.05)	-0.47 (0.45)	-0.09 (0.21)	0.15*** (0.05)
Constant	-1.82*** (0.03)	-1.68*** (0.13)	-1.74*** (0.21)	-1.83*** (0.03)
Observations	23,803	636	529	22,638

Note: ***, ** and * indicate significance levels of 1%, 5% and 10%, respectively. Standard errors in parentheses.

Source: Authors' own computations using UNHS, 2019.

7.4.3. Infrastructure as a Motive for Migration

As earlier mentioned, the quest for better infrastructure is one of the reasons migration takes place in Uganda. Table 7.5 compares access to infrastructure between rural-urban migrants and urban-urban migrants. The base is other groups. As expected, urban-urban migrants have more access to improved infrastructure in terms of public housing, piped water, finished walls, finished floors, electricity and grid electricity as shown in Table 7.5. The differences between urban-urban migrants and other groups are statistically significant at the 1 percent level. For example, 69 percent of urban-urban migrants live in houses with finished walls and 72 percent live in houses with electricity. For rural-urban migrants, 6 percent live in public housing and are statistically significant. Only 10 percent of urban-urban migrants have access to public housing and it is statistically significant at the 1 percent level.

Table 7.5: Access to infrastructure comparison between migration types

Infrastructure	Rural-Urban	Urban-Urban
Public Housing	0.06***	0.10***
Piped Water	0.08	0.18***
Finished Walls	0.49	0.69***
Finished Floors	0.36	0.65***
Shared Toilet	0.42***	0.55***
Electricity	0.50***	0.72***
Grid Electricity	0.12	0.38***
Number of Rooms for Sleeping	2.12***	1.88***

Note: ***, ** and * indicate significance levels of 1%, 5% and 10%, respectively. Standard errors in parentheses.

Source: Authors' own computations using the UNHS, 2019.

The study measures the standard of living of household on Table 7.6. The probit regression suggests that while access to piped water is associated with perception of improvement of living conditions, only non-migrants' households have access to piped water. This result is consistent with the assertion that about 16 percent of the population does not have access to safe water (water.org, 2022). This inequality between migrant and non-migrant households is largely due to infrastructure-related costs of providing water in un gazetted informal urban settlements. Most informal urban settlements are in swamps and in-habitable areas (Richmond, Myers, & Namuli, 2018).

Table 7.6 also suggests that access to public housing has been difficult for different types of migrants, except urban-urban migrants. Most of the accessed houses did not have finished walls for all groups. Nevertheless, the floors were finished and the number of sleeping rooms has improved for all groups. All households, regardless of migration status shared toilets. Indeed, only 30 percent of Ugandans have access to improved sanitation (World Bank Group, 2018). Most toilets are shared and do not reflect facility quality (*ibid*). In large urban areas, sewerage coverage is less than 5 percent while in small urban areas, it is almost non-existent (*ibid*). The sewerage system is on-site for most urban areas and the existence of faecal sludge management systems is negligible, with serious water quality and health implications (*ibid*). While access to electricity has improved for all household groups (Table 7.6); connectivity to the national grid remains a challenge for most household groups (Table 7.6). Indeed, electricity access rates, among households, remain among the lowest in the world with only about 40 percent connected to the grid (Monitor, 2022). Uganda has a very low per capita electricity consumption, which, at 80 kWh per year, is far below its peers (Kenya at 155 kWh per year and Ghana at 300 kWh per year) (Godinho & Eberhard, 2019). Connections are virtually nonexistent for the bottom 40 percent of the population (Godinho & Eberhard, 2019). Electricity supply has improved with the entry of a new hydro-power plant, but tariffs are high (EPRC, 2018).

Table 7.6: Probit regression of infrastructure status – Living Standard Worsened

	Living Standard Worsened			
	(1) All	(2) Rural-Urban	(3) Urban-Urban	(4) Non-Migrants
Public Housing	-0.05 (0.03)	0.10 (0.19)	-0.31* (0.19)	-0.04 (0.04)
Piped Water	-0.14*** (0.02)	0.31* (0.18)	-0.26 (0.17)	-0.15*** (0.02)
Finished Walls	0.03** (0.01)	0.23* (0.12)	0.33** (0.14)	0.02 (0.01)
Finished Floors	-0.33*** (0.02)	-0.45*** (0.13)	-0.43*** (0.15)	-0.33*** (0.02)
Shared Toilet	0.09*** (0.01)	0.06 (0.10)	0.35*** (0.13)	0.09*** (0.01)
Access to Electricity	-0.46*** (0.01)	-0.49*** (0.10)	-0.71*** (0.14)	-0.46*** (0.01)
Connected to Electricity Grid	0.07*** (0.02)	-0.01 (0.16)	0.04 (0.15)	0.08*** (0.02)
Number of sleeping rooms	-0.12*** (0.00)	-0.11** (0.04)	-0.12** (0.06)	-0.12*** (0.01)
Constant	0.27*** (0.01)	0.10 (0.12)	0.10 (0.19)	0.27*** (0.02)
Observations	61,597	874	657	60,066

Note: ***, ** and * indicate significance levels of 1%, 5% and 10%, respectively. Standard errors in parentheses.

Source: Authors' own computations using the UNHS, 2019.

7.4.4. Integration as a Motive for Migration

The ability of a migrant to integrate within a community can be measured by indicators like the ability of a migrant to save formally as shown in table 7.7. A rural-urban migrant is unlikely to open an account and save compared to an urban-urban migrant. For urban-urban migrants, 67 percent save formally and it is statistically significant. As earlier mentioned, access to public services and financial inclusion has been particularly lacking for poor households, especially in the northern and eastern parts of the country. While mobile financial services have improved financial inclusion, formal bank inclusion is low, and there are large disparities between the rich and the poor. Less than 20 percent of the adult population keep their savings at formal deposit-taking institutions, including banks, microfinance institutions and savings and credit institutions (Sebusende, 2017). In addition, more than 60 percent of Ugandans are unable to access formal financial institutions for credit (*ibid*).

Table 7.7: Formal Saving comparison between migration types

Integration	Rural-Urban	Urban-Urban
Formal Saving	0.497	0.67***

Note: ***, ** and * indicate significance levels of 1%, 5% and 10%, respectively. Standard errors in parentheses.

Source: Authors' own computations using the UNHS, 2019.

7.5. Conclusions

Households are increasingly migrating to urban areas. This is to tap into the employment, infrastructure and integration opportunities that exist in the urban area. However, Ugandan urban areas are progressively facing pressure from increased migration and the attendant demand for public services, infrastructure and employment. Therefore, this study sought to provide evidence that can justify the refocusing of investments to create employment, provide infrastructure and promote the integration of internal migrants, for this would facilitate the attainment of a favorable population age structure for sustainable development in the face of rapid urbanization.

Using UNHS 2019 and WDI data the study found that 12% of Ugandans have migrated to urban areas and 60% of migrants are from rural areas. Most households are migrating from the eastern and northern regions to escape poverty-related causes.

The paper found evidence of a relationship between urbanization growth rate and a decrease in mortality rate, and a deceleration of dependency ratio and an increase in working age population. The low mortality is related to the high distribution of healthcare facilities in urban areas. Equally the low dependency and high working age ratios are related to the high supply of wage employment in urban areas. Similarly, migration has a negative effect on fertility rates, partly, because of different social norms in urban areas. Urban women have a high rate of female labour participation, have access to education and are likely to have later marriage and motherhood.

Nevertheless, a disaggregation of migrant types suggests that rural-urban migrants tend to be disadvantaged in obtaining employment in urban areas. In this case, rural-urban migrants mostly transition into self-employment in the informal sector to supplement their incomes. Most of the unemployed tend to be women and the youth. The reasons for unemployment tend to be low skills and low education status due to low access to public infrastructure such as schools and hospitals, especially in the northern and eastern regions.

Concerning access to infrastructure, urban-urban migrants are better placed to access public housing, piped water, a house with finished walls and finished floors, and grid electricity. Migrants, regardless of their place of origin, live in settlements with an inadequate supply of water infrastructure. Access to public housing and toilets has been difficult, especially for rural-urban migrants. While access to electricity has improved for all household groups, connectivity to the national grid remains a challenge for most household groups.

7.6. Policy recommendations

There is a call for the intensification of poverty reduction interventions in the northern and eastern areas.

The evidence from this report suggests that there is a need for intensification of planned urbanization to increase access to employment and infrastructure to reduce poverty and amplify the magnitude of the demographic dividend. The benefits associated with high rates of urbanization such as high female labour participation; low fertility, mortality and dependency rates; and high working age ratios should be harnessed to accelerate demographic dividend and to enhance sustainable development.

The government and development partners should develop programs that assist the rural populace; especially the women, the youth, and the northern and the eastern region. The assistance should focus on skilling (Technical and Vocational Educational Training (TVET)), business development (financial inclusion, record keeping etc) and registration of businesses of those in the informal sector.

There is a strong imperative for a public –private mechanism for the provision of low-cost housing and public toilet system to support rapid urbanization. There is also a need to increase the distribution of electricity beyond the 40 percent currently provided.

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8.0. Introduction

The Uganda Vision 2040 underpins socioeconomic factors such as the country's rapid population growth, a young population age structure and a small proportion of the working population as major threats to Uganda's aspiration of achieving socio-economic development. As part of efforts to position the country on the stride for socioeconomic development, the vision recommends that the country anchors its human resource development strategy on maximising the benefits of the demographic dividend (NPA 2010). As part of human resource development, the National Population Policy emphasises the need for the population to adopt an urban character that ascribes demographically rational behaviours, a positive attitude towards work, a drive to aim higher, as well as better application of technical approaches to problem solutions (NPC 2018).

Relatedly, modelling results for harnessing the demographic dividend (DD) from a combined scenario that emphasises economic policies and human capital development have established that for Uganda to harness the demographic dividend by 2040, the citizenry should embrace rational behaviours such as; women not producing more than 3 children within their reproductive lifespan (averagely 2.48 children), school age children and particularly girls keeping in school for at least 12 years (attainment of at least secondary education), the population surviving to at least 75 years, the share of the working age population being approximately 57%, the dependency ratio not exceeding 58% and the average annual population growth rate not exceeding 2.5% (NPA 2018). These rational behaviours are all enshrined in the urban character coined through the process of urbanisation.

Currently (2022), Uganda's urban population stands at about 17 million people and accounts for 37% of the country's population. The country has experienced an urban population growth of over 15 million people since 1969 (UBOS 2014). This exponential growth of the urban population presents the opportunity of promoting the urban character across the country thereby forming a strong base for prospects of harnessing the demographic dividend. Therefore, this paper seeks to establish the influence of urbanisation on the socio-economic factors for harnessing the demographic dividend in Uganda, through an exploratory analysis of data from the 2016 Uganda Demographic and Health Survey.

8.1. Problem Statement

The demographic dividend (DD) is popularly explained by an increase in the working population and a reducing dependant population together with strategic investments in health, education, economic policy amidst strong governance and accountability systems. On the other hand, Uganda has persistently had one of the youngest populations in the world that has been predominantly influenced by a high total fertility rate (over 5 children per woman).

For Uganda to attain the DD, the total fertility rate should be drastically reduced to utmost 3 children per woman. The National Population Policy notes that urbanization is expected to operate as the transformational force in a number of demographic, economic and social indicators to influence fertility decline that would subsequently lead to the attainment of the DD. No assessment has however been done to establish whether urbanisation has had the envisaged impact. It is thus critical that the influence of urbanisation on socioeconomic factors for harnessing the DD is adequately investigated. This paper uses the number of children ever born as a proxy for total fertility rate poised as a precursor for the attainment of the DD.

8.2. Objectives

The overall objective of this paper is to establish the influence of urbanisation on socioeconomic factors for harnessing the demographic dividend in Uganda.

8.2.1. Specific Objectives

Specifically, the paper seeks to ascertain:

- The influence of urbanisation on education as a socioeconomic factor for harnessing the DD
- The impact of urbanisation on health as a socioeconomic factor for harnessing the DD
- The influence of urbanisation on economic welfare as a socioeconomic factor for harnessing the DD.

8.3. Methodology

8.3.1. Study design

The 2016 UDHS is a nationally representative household-based survey, with interviewer administered questionnaires used to obtain a range of detailed health related and demographic information (UBOS 2016).

8.3.2. Sampling design

Using the 2014 Uganda Population and Housing Census, a two-stage cluster sampling technique was used to sample 20,880 households from 696 clusters and 18,506 women aged 15–49 years and 5,336 men age 15–54 years were interviewed.

In the first stage, 697 EAs were selected where 162 EAs (with 4379 women) in urban areas and 535 (with 14,127 women) in rural areas. One cluster from Acholi sub region was eliminated because of land disputes.

8.3.3. Data analysis

For a country to harness the fruits of the demographic dividend, it must undergo the age structural change with more persons in the working age than the dependent ages (older and younger ones). Changes in TFR determine the resultant age structure of the population (NPC 2018). The TCEB is used as a proxy figure for Total Fertility Rate (TFR) because the number of children ever born reflect the fertility of the woman (Eliya Msiyaphazi Zulu, Onyango et al. 2015). The TFR should be drastically reduced to utmost three children per woman which is referred to as “expected number of children” to attain the DD in this study. There were 18,506 women aged 15–49 years of which 4,379 were in urban areas. Out of total number of women interviewed (18,506 women), 11,350 women had the expected number of children (utmost 3 children) of which 3,219 were from urban areas.

8.3.4. Outcome and explanatory variables

Women were asked about place of residence which was either urban or rural and they were also asked about “children living with her”, “children living elsewhere” or “children dead” to obtain the total number of children borne (TCEB) by the mother. TCEB will be the outcome variable. The TCEB is categorized into binary basing on the fact that for Uganda to attain the age structural change, a woman should averagely deliver utmost three children. TCEB was categorized into two i.e the expected number of children “0-3 children=1” and “four or more children=0” deemed high for attaining the DD. The analysis will be controlled by place of residence.

From the questionnaire data available, we sought to analyze 14 explanatory variables which, based on a review of literature, have potential to influence TCEB which leads to change in age structure and economic wellbeing: education, modern contraceptive use, age at first sex, age at first marriage, marital status, wealth index, region of residence,

economic empowerment, desire to have more children, timing to have more children, number of sexual partners and working status. These were classified for analysis under two broad themes: (1) socio-demographic factors, (2) economic factors.

The wealth index, a proxy measure of a household's long-term standard of living, helped cater for the effect of consumer goods, dwelling characteristics, type of drinking water source, toilet facilities, among others. Details of the philosophy and construction of the indices are discussed in detail by Measure DHS.

8.3.5. Description of variables

Number of children ever born was categorized into two namely: expected number of children (0-3), high number of children (4 or more). Education level into: secondary or more (ideal education), primary, pre-primary and no education (below secondary).

Contraceptive use into: traditional and modern contraceptive use. Age at first sex into: young age at first sex (8-17), ideal age at first sex (18-49). Wealth quintile into: poor (poor and poorest), wealthy (middle class, rich and richest).

Marital status into: not in marital union and in marital union. Age at first marriage into: young age at first marriage (8-17), ideal age at first marriage (18-49).

Child preference into: wants less children (1-3), wants more children (4-7). Number of sexual partners in a lifetime into: one sexual partner and more than one sexual partner.

Economic empowerment into: Ownership of a house, land and earning an income and; region into: Kampala, Central, Eastern, Northern and Western.

8.3.6. Statistical methods

The bivariate associations between each socioeconomic factor were explored, and those significant at $p<0.05$ were entered together into a logistic regression model of the partial least squares. Non-significant explanatory variables were removed from the model. Pearson's correlation matrix was used to check for collinearity between all variables.

To better understand the strongest effects, we explored associations and the factors that independently predicted total children ever borne using cross-tabulation and chi-square tests. All analyses were conducted in Stata version 15

8.3.7. Ethical procedures

The UDHS data collection procedures were approved by the ICF Macro (Calverton, Maryland), Uganda Bureau of Statistics and informed consent was obtained from respondents at the start of the individual interviews. Permission to use these data was obtained from 'Measure. No further ethical approval was necessary since the study was based on anonymous public use data with no identifiable information on survey respondents.

8.3.8. Limitations.

The major limitation of this paper is that the analysis considers only the female population. This is because the dependent variable total children ever born (TCEB) can only be derived from data on women. Moreover, men tend not to keep an accurate record of the number of children they have fathered, their ages, birth intervals and the pregnancy history of their wives.

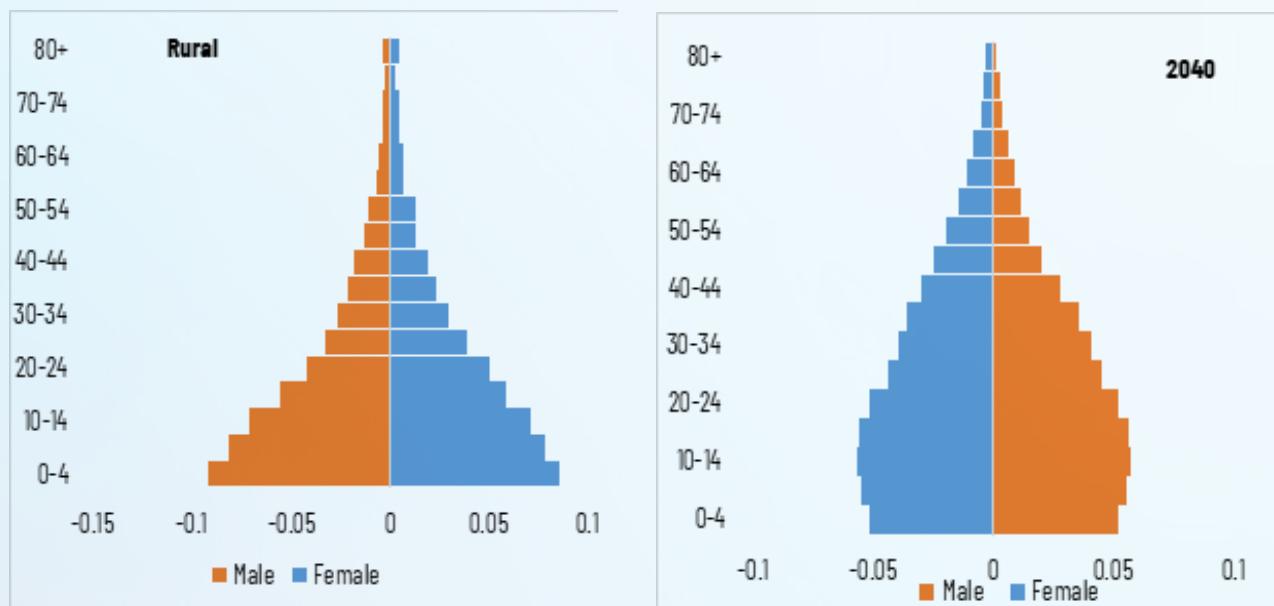
8.4. Findings

This section presents analytical derivations of rural-urban differentials of socioeconomic factors for harnessing the demographic dividend (DD). The section starts with synthesis of the population age and sex structures for the rural and urban areas together with the envisaged structure for 2040. It winds up with a multivariate analysis of the socioeconomic factors for harnessing the DD generated using the partial least squares regression.

8.4.1. Population age and sex structure for rural and urban areas

The age and sex structure of Uganda's rural population is broad-based with a narrowing apex forming the shape of a perfect pyramid (Figure 8.1). This implies that the dependent infant and early-age youth population is higher than the working population. This population structure is dissimilar to the one envisioned in the modelled structure of 2040.

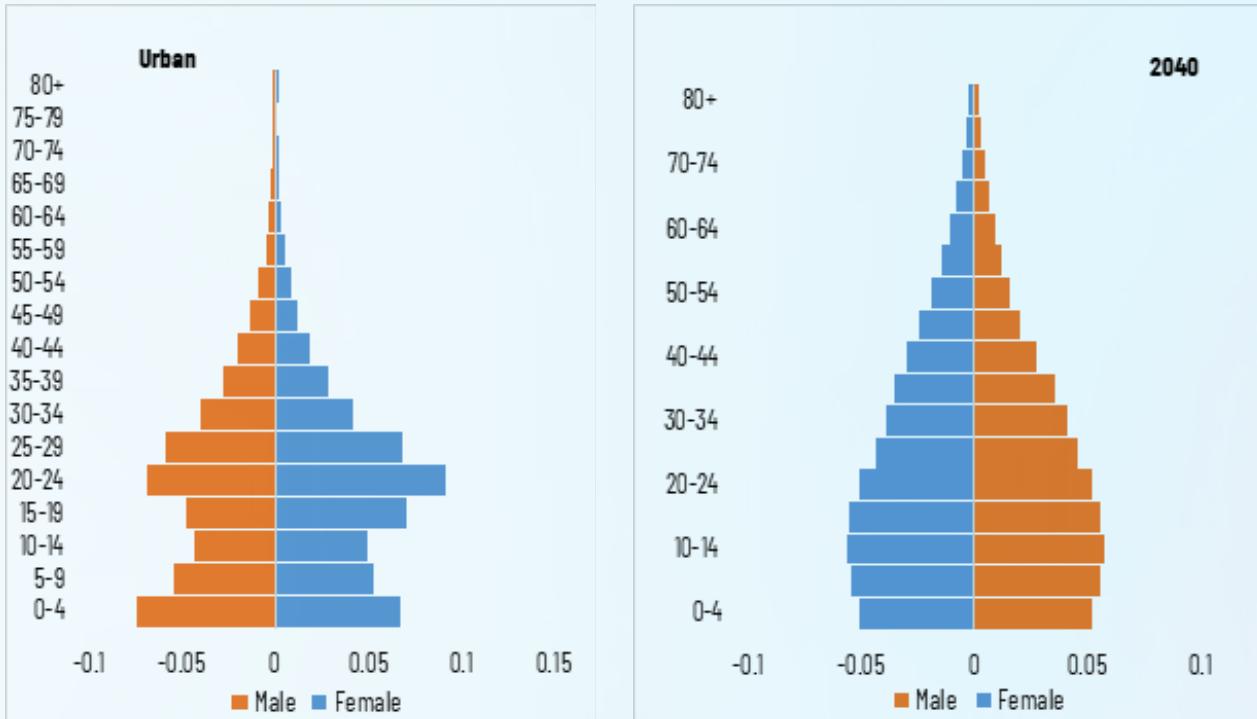
Figure 8.1: Rural population structure in 2014 and ideal population structure in 2040



Source: Uganda Bureau of Statistics

Unlike the rural population structure, the age and sex population structure of the urban areas has an imperfect pyramid characterised by a big bulge of the working population and a reduced dependent population (Figure 8.2). In relation to the structure envisioned in 2040, the urban population structure mirrors prospects of harnessing the demographic dividend.

Figure 8.2: Urban population structure in 2014 and the ideal structure in 2040



Source: Uganda Bureau of Statistics

8.4.2. Descriptive analysis of socioeconomic factors for harnessing the demographic dividend in Uganda

a) Demographic and socioeconomic distribution of respondents

Almost all demographic and socioeconomic factors that condition the attainment of the demographic dividend were found to have a statistically significant relationship with total children ever born (TCEB). TCEB refers to total children ever born categorised into two i.e expected children (utmost 3) and high number of children (more than 3). In the modelling of prospects for harnessing the DD, total children ever born is used as a proxy for estimating total fertility rate (Eliya Msiyaphazi Zulu, Onyango et al. 2015).

A total of 4,943 women were interviewed within the urban areas while 13563 were interviewed in the rural areas. Majority (73.2%) of women living in urban areas have the expected number of children (utmost 3) while the rural has 58.2% of its women population having the same number of children.

Table 8.1: Socio demographic distribution of respondents

	Urban	Rural								P<0.05
	High number children (>3)	Expected number children (<=3)			High number children	Expected number children				
	%	%	%	Number	%	%	%	Number		
Region										
Kampala	20.9	79.1	100	1,025						0.000
Central	25.6	74.4	100	1,605	40.2	59.8	100	2,851		
Eastern	28.1	71.9	100	773	43.6	56.4	100	4,106		
Northern	31.3	68.7	100	532	42.1	57.9	100	3,015		
Western	31.2	68.8	100	1,009	40.8	59.2	100	3,591		
Age of respondent										
15-24	0.9	99.1	100	2,178	2.8	97.2	100	5,908		0.000
25-49	47.2	52.8	100	2,765	71.9	28.1	100	7,655		
Highest Education Level										
Below secondary	41.3	58.7	100	2,138	48.5	51.5	100	10,273		0.000
Secondary+	15.7	84.3	100	2,805	20.9	79.1	100	3,290		
Wealth										
Poor	39.8	60.2	100	522	45.8	54.2	100	6,121		0.000
wealthy	25.2	74.8	100	4,421	38.6	61.4	100	7,442		
Marital Status										
Not in union	13.7	86.3	100	2,299	20.2	79.8	100	4,984		0.000
In union	38.1	61.9	100	2,644	54.4	45.6	100	8,579		
Contraceptive use										
Traditional	22.8	77.2	100	3,491	37.4	62.6	100	10,132		0.000
Mordern	36.3	63.7	100	1,452	54.9	45.1	100	3,430		
Age at first sex										
Young age (15-17)	29.8	70.2	100	3,244	42.6	57.4	100	10,141		0.000
Legal age at first (18-49)	20.8	79.2	100	1,695	39.5	60.5	100	3,414		
Preferred waiting time for birth of a/another child										
Within 2 years	11.4	88.6	100	1,134	22.7	77.3	100	2,653		0.000
More than 2 years	9.2	90.8	100	2,154	17.5	82.5	100	5,521		

	Urban	Rural								
	High number children (>3)	Expected number children (<=3)				High number children	Expected number children			P<0.05
	%	%	%	Number	%	%	%	Number		
Desire for more children										
Within 2 years	11.8	88.2	100	1,512	19.1	80.9	100	3,281	0.000	
More than 2 years	33.4	66.6	100	3,431	49.1	50.9	100	10,281		
Total lifetime number of sex partners										
more than one sexual partner	32.4	67.6	100	2,840	50	50	100	6,614	0.2254	
one sexual partner	30.3	69.7	100	1,331	47	53	100	5,025		
working status										
Not working	16.5	83.5	100	1,627	24.2	75.8	100	3,359	0.000	
Working	31.8	68.2	100	3,317	47.6	52.4	100	10,204		
Economic empowerment										
Not empowered	23.8	76.2	100	4,436	36	64	100	11,020	0.000	
Empowered	52.7	47.3	100	507	67	33	100	2,543		
Total	26.8	73.2	100	4,943	41.8	58.2	100	13,563		

8.4.3. Multivariate analysis of the socioeconomic factors for harnessing the DD in Uganda

The significant variables ($p<0.05$) at the bivariate level were included in the two fit logistic regression models. The first model (model 1) shows the association between total children ever born and the explanatory factors in rural areas. The second model (model 2) adjusts for the enabling factors to the first model for women in urban areas.

Results show that women in urban areas are twice more likely to produce utmost three children compared to their counterparts in rural areas (OR 2.0, CI: 1.9-2.2).

The explanatory factors that were significantly related to the expected children (utmost 3 children) were; age, education level, wealth quintile, marital status, contraceptive use, age at first sex, waiting period to have a child, number of life partners, desire for children and economic empowerment.

In terms of age, women aged 25-49 years and living in urban areas are less likely (OR 0.01: CI 0.0-0.0) to have the expected number of children as compared to their counterparts in the lower age groups of 15-24. Women in higher age groups have stronger desire for a higher number of children as they tend towards the age of menopause (Van Balen, Verdurmen et al. 1997). For education level, women that have attained above secondary level education and living in urban areas are three times (OR 3.1: CI 2.5-3.8) more likely to have the expected number of children compared to those with education levels below secondary. Women that have attained higher levels of education are more knowledgeable about family planning and desire to have few and quality children (Shapiro 2012). The wealthier women living in urban areas are more likely (OR 1.63: CI 1.2-2.2) to have the expected children compared to their counterparts in the poor and poorest quintiles. Wealthy women are often distracted away from the likelihood of sexual exposure as they are actively involved in economic productivity (Ellis, Manuel et al. 2006).

On marital status, women in a marital union and living in urban areas are less likely (OR 0.54: CI 0.4-0.7) to have the expected children (utmost 3 children) as compared to those not in a marital union. When a woman is in a marital union, the chances of sexual exposure are high hence the likelihood of having more than three children (Wolff, Blanc et al. 2000). With respect to contraceptive use, women using modern contraceptives and living in urban areas are less likely (OR 0.76: CI 0.6-0.9) to have the expected number of children (utmost 3 children) as compared to their counterparts using the traditional contraceptives. Women in developing countries where Uganda is part, extensively use traditional contraceptives because they find them more accessible, user friendly and affordable (Williamson, Parkes et al. 2009).

Women whose age at first sex is within the legally accepted age range of 18-49 and are living in urban areas are 3 times more likely (OR 3.0: CI 2.4-3.5) to have the expected number of children as compared to their counterparts whose first age at first sex was within the ages 8-17. Girls who engage in sexual intercourse before 18 years have little or no say on decisions about their sexual and reproduction health and therefore have no influence on the number of children they will have in their reproductive lifespan (NPC 2018). Regarding the number of sexual partners, women who have more than one sexual partner and living in urban areas are less likely (OR 0.74: CI 0.6-0.9) to have the expected number of children as compared to those who have one sexual partner. Having multiple sexual partners creates a likelihood of having many children as each partner would want to impose their expected number of children (UBOS 2016).

With respect to economic empowerment, women who are economically empowered and living in urban areas are less likely (OR 0.60: CI 0.5-0.8) to have the expected number of children as opposed to their counterparts who are not economically empowered. Economic empowerment is attributed to ownership of a house, land and a stable income. When women are economically empowered, they have the power to make decisions about their fertility. In so doing, they may as well choose to have more than 3 children because they believe they can afford to take care of them (Upadhyay, Gipson et al. 2014).

Table 8.2: Adjusted odds ratios (ORs) for regression on total children ever born by selected explanatory variables among women in rural and urban areas

	Model1(Rural)		Model2 (Urban)	
Region(rc=Kampala)	OR	CI	OR	CI
Central	0.81	[1.0-1.0]	0.8	[0.6-1.0]
Eastern	0.94	[0.8-1.1]	0.85	[0.6-1.1]
Northern	1.49***	[1.2-1.8]	1.07	[0.8-1.5]
Western	1.64***	[1.4-1.9]	1.09	[0.8-1.4]
Age of respondent (rc=15-24years)				
25-49	0.01***	[0.0-0.0]	0.01***	[0.0-0.0]
Highest Education level (rc=below secondary)				
Secondary+	3.6***	[3.1-4.1]	3.1***	[2.5-3.8]
Wealth (rc=poor and poorest)				
Wealthier (middle and wealthier)	1.41***	[1.2-1.6]	1.63**	[1.2-2.2]
Marital status(rc=not in union)				
In union	0.53***	[0.5-0.6]	0.54***	[0.4-0.7]
Contraceptive use (rc=Traditional FP)				
Use of Modern contraceptives	0.85**	[0.8-1.0]	0.76**	[0.6-0.9]
Age at first sex(rc=young age 8-17)				
Legal age at sex (18-49)	2.42***	[2.2-2.7]	2.87***	[2.4-3.5]
Timing for child (rc=within 2 years)				
More than two years	0.31***	[0.3-0.4]	0.30***	[0.2-0.4]
Number of Life time sexual partners (rc=with one partner)				
More than one sexual partner	0.80***	[0.7-0.9]	0.74**	[0.6-0.9]
Working status of respondent (rc not working)				
Working	0.91	[0.8-1.0]	0.96	[0.8-1.2]
Economic empowerment(rc= not empowered)				
Economically empowered	0.60***	[0.5-0.7]	0.60***	[0.5-0.8]
Observations	12,156		3,671	

Exponentiated coefficients; 95% confidence intervals in brackets. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

8.5. Conclusion

Urbanisation has notable influence on the reduction of the number of children per woman to utmost 3 modelled as suitable for the attainment of the DD. The influence of urbanisation is especially through women's education levels, increased household welfare and age at first sex.

8.6. Policy Recommendations

A woman with secondary level education and above living in urban areas is more likely to have utmost 3 children desirable to change the structure of the population intended for harnessing the DD. Therefore, it is important that the girl child is supported to attain secondary level education and above for Uganda to attain the DD. Programs such as universal secondary education should target girls more.

Women living in households that fall within the wealthy category in urban areas are more likely to have the DD's desired number of children (utmost 3). Programs aimed at improving household incomes should be scaled up to target women emancipation. Operation Wealth Creation, the Parish Development Model and other poverty alleviation programs should invest more in empowering higher proportions of women.

Women whose age at first sex is within the legally accepted age range of 18-49 and are living in urban areas are more likely to have the expected number of children (utmost 3) as compared to their counterparts whose age at first sex was within the ages 8-17. Girl children and their caretakers should be sensitized on the dangers of having sex at an age earlier than the legal age of 18. Scale up sex education to cover all levels of education including primary using appropriate information, education and communication materials (IECs).

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9.0. Introduction

Uganda has, over the years, developed programmes aimed at eradicating poverty; nevertheless, poverty remains a challenge, with poverty rates standing at 20.3%, according to UNHS 2019/2020. This chapter examines mindset change for wealth creation and highlights the leadership and governance issues therein.

Leadership and governance are critical aspects of development initiatives in Uganda. In relation to the theme of SUPRE, which is "Accelerate Demographic Transition: Refocus Investments to attain a favourable population age structure for sustainable development, mindset change for wealth creation is key for meaningful investments that will achieve sustainable development.

Leadership means influencing and supporting others to work enthusiastically towards achieving objectives. In the Ugandan context, leadership refers to the part played by different actors with the responsibility to guide others, especially those mandated under various laws to lead for a common goal or purpose. The leaders include; the Executive, Members of Parliament, local council leaders from LCI to LCV, Resident District Commissioners, Resident City Commissioners, Youth Council representatives at all levels, Women Council representatives at all levels, Persons with Disabilities Council representatives at all levels, Older Persons Council representatives at all levels. At technical levels, all heads of departments are leaders. The relevant laws relating to leadership of the various categories of the population are the Constitution of the Republic of Uganda, Local Government Act Cap 243, National Youth Council Act Cap 239, National Women Council Act Cap 240 among others.

According to the Uganda Vision 2040, the tenets of good governance include; constitutional democracy, protection of human rights, rule of law, political and electoral processes, transparency and accountability, government effectiveness and regulatory quality and security. Human rights observance is critical in ensuring good governance. Leadership is a crucial aspect of service delivery. If there is good and effective leadership, service delivery will be guaranteed in addition to mindset change to provide wealth creation among the population.

Bashir Ibrahim (2019), in his article; Achieving Good Governance and Development, notes that 'in most parts of Africa, the role of leadership in governance and development is not clearly understood'. It is essential to have influential leaders that are capable of designing comprehensive policies and fundamental goals which enhance growth and prosperity. Essentially, it is the primary responsibility of leaders to ensure the realization of these goals. Good governance is important for development. Governance is performance, delivering high-quality political goods to citizens by governments of all minds. The Parish Development Mode is used in this article to explore ways of enhancing mindset change for wealth creation.

9.1. Problem Statement

Government has had several initiatives to ensure service delivery and participation of the population including youth, women, persons with disabilities and older persons, aimed at supporting their participation in the development process as well as ensuring their access to services and economic activities and ultimately, wealth creation. These programmes, however, have not resulted in wealth creation given the high poverty levels standing at 20.3% according to UNHS 2019/2020, translating into 8.3 million people and upper poverty being 30.1%, while international poverty which is 1.99 dollars, puts the poverty rate at 40.1 %. Some of the critical factors leading to non-realization of wealth creation include negative mindsets among the implementors, and the would-be beneficiaries of government programmes.

Mindset issues affecting wealth creation, according to the National Development Plan III, include; "general lack of responsibility and ownership of government programmes, a serious obstacle to development. This is attributed to low popularization and domestication of development initiatives, programmes and policies to lower levels, in addition to passive, unproductive and highly dependent population coupled with low literacy levels of citizens. A dependency syndrome is widespread throughout the country and at all levels; a high tendency among Ugandans to consider self-interest before anything. Several behavioural barriers to the adoption of positive mindsets are cushioned by long years of social conditioning. This is seen from negative cultural beliefs and practices that promote stigma and discrimination, the inability to live healthy and productive styles.

These negative mindsets are juxtaposed, with weak leadership and poor governance of the programmes with corruption cases reported, especially at local government levels. In addition, Uganda's population is generally young, with 53.1% below the age of 18 years, and only 3.7% above 60 years, (UBOS 2019). However, this young population is not skilled, making it difficult to benefit from the demographic dividend. The inadequate skills among the youth, coupled with high unemployment rates and negative mindsets, pose a challenge to the effective implementation of government programmes and service delivery. Unless deliberate efforts are made to address mindset change and, ultimately good governance and leadership that drive economic development, the Uganda Vision 2040 may not be realized and Uganda may not benefit from the demographic dividend. The Parish Development Model, given its comprehensive seven pillars if well implemented, provides an opportunity to address mindset change for wealth creation.

9.2. Objectives

The objectives of this chapter are;

- To examine various wealth creation programmes in Uganda.
- To discuss the mindset issues affecting wealth creation programmes.
- To establish the leadership and governance issues under the wealth creation programmes.
- To make recommendations on key policy issues affecting mindset change for wealth creation.

9.3. Methodology

The article used desk review method. The desk review is composed of publications from Ministries Departments and Agencies on wealth creation programmes, mindsets, leadership and governance. It analyses the performance of government programmes aimed at wealth creation while identifying mindset issues involved in their implementation and their leadership and governance. The Parish Development Model is used in the analysis to ensure mindset issues are addressed. A review of policy documents on government programming was done through secondary data from relevant articles, journals and textbooks to derive the findings and draw conclusions and recommendations.

9.4. Examination of some wealth creation programmes in Uganda

The national level policies are developed to guide the implementation of government programmes. The Government has developed several programmes, especially those aimed at alleviating poverty, starting with programmes such as the Entandikwa Credit scheme, Youth Enterprise Scheme, Youth Capital Venture Fund and those targeting particularly vulnerable groups; nevertheless, poverty levels remain high at 20.3%.

9.4.1. The Entandikwa Credit Scheme

In 1995, the NRM government instituted the Entandikwa Credit Scheme (ECS), a parallel state-sponsored credit scheme. This programme did not achieve its objectives and ended after a short period of implementation. The programme experienced a number of challenges ranging from; poor programme design, organisational laxity, weak credit delivery mechanisms, patronage tendencies, lack of, or inadequate supervision, and loan recovery problems which frustrated the scheme, according to an online article 2005. These are some of the governance and mindset issues that affected the intentions of the government to achieve wealth creation through a loans scheme as startup capital for business and

income generating activities. The Parish Development Model takes cognizance of these challenges which at national level range from design issues with a focus on top-down approach as opposed to bottom-up programme design and local government level patronage tendencies and inadequate supervision of programme implementation.

In addition, in recent years, government has developed and implemented wealth creation programmes targeting vulnerable groups such as the Youth Livelihood Programme targeting the youth, Uganda Women Entrepreneurship programme targeting the women, Emyooga, Operation Wealth creation and currently the Parish Development Model.

9.4.2. Emyooga

The Emyooga presidential initiative on wealth and job creation was launched in 2019. It aims at economically empowering persons under identified specialized skills groups or belonging to a specific interest group registered in SACCOS at constituency and parish level. Under the initiative, the most vulnerable individuals (in particular those in the informal sector), are registered into SACCOS and given money to startup money-generating initiatives. This programme reached some groups but not all intended beneficiaries as reported by Parliament through their monitoring visits. The mindset issues affecting this programme included; over politicization of the programme by the local leaders that left out intended beneficiaries and reports of corruption of the implementors affecting availability of funds to meet programme objectives. As noted by the Parish Development Model, the Emyooga programme was centrally designed and implemented through the local governments making the population believe it was not a loan but funds for political campaigns in a few cases where funds were released.

9.4.3. Youth Livelihood Programme.

According to the Ministry of Gender report 2022, The Youth Livelihood Programme (YLP) is a Government of Uganda Programme, targeting the unemployed and poor youth in the country. The Programme was launched in the FY 2013/14 and covers all Local Governments (LGs) including Municipal Councils (MCs), Cities and Kampala Capital City Authority (KCCA). The main objective of the Programme is to empower the youth to harness their social economic potential and increase self-employment opportunities and income levels. YLP provides interest-free revolving funds to unemployed and poor youth (aged 18-30 years), including but not limited to; school dropouts, youth living in slums, youth with no formal education, single parents, youth with disabilities, and those living with HIV/AIDS among others. The youth must be in groups-Youth Interest Groups (YIGs) numbering 5-15 members, of which at least 30% should be female.

The YIGs are provided revolving funds to a maximum of UGX. 25Million depending on projects of their choice. The funds are disbursed directly to the beneficiary groups that successfully go through the beneficiary selection, enterprise selection, project appraisal and approval, training and signing of the Financing Agreements at Sub- County/Division and District/City/Municipal Authority levels. Cumulatively, funds disbursement stands at UGX. 169.4bn which financed a total of 21,280 youth groups/projects. This has benefited/served 251,679 youth with 46% female.

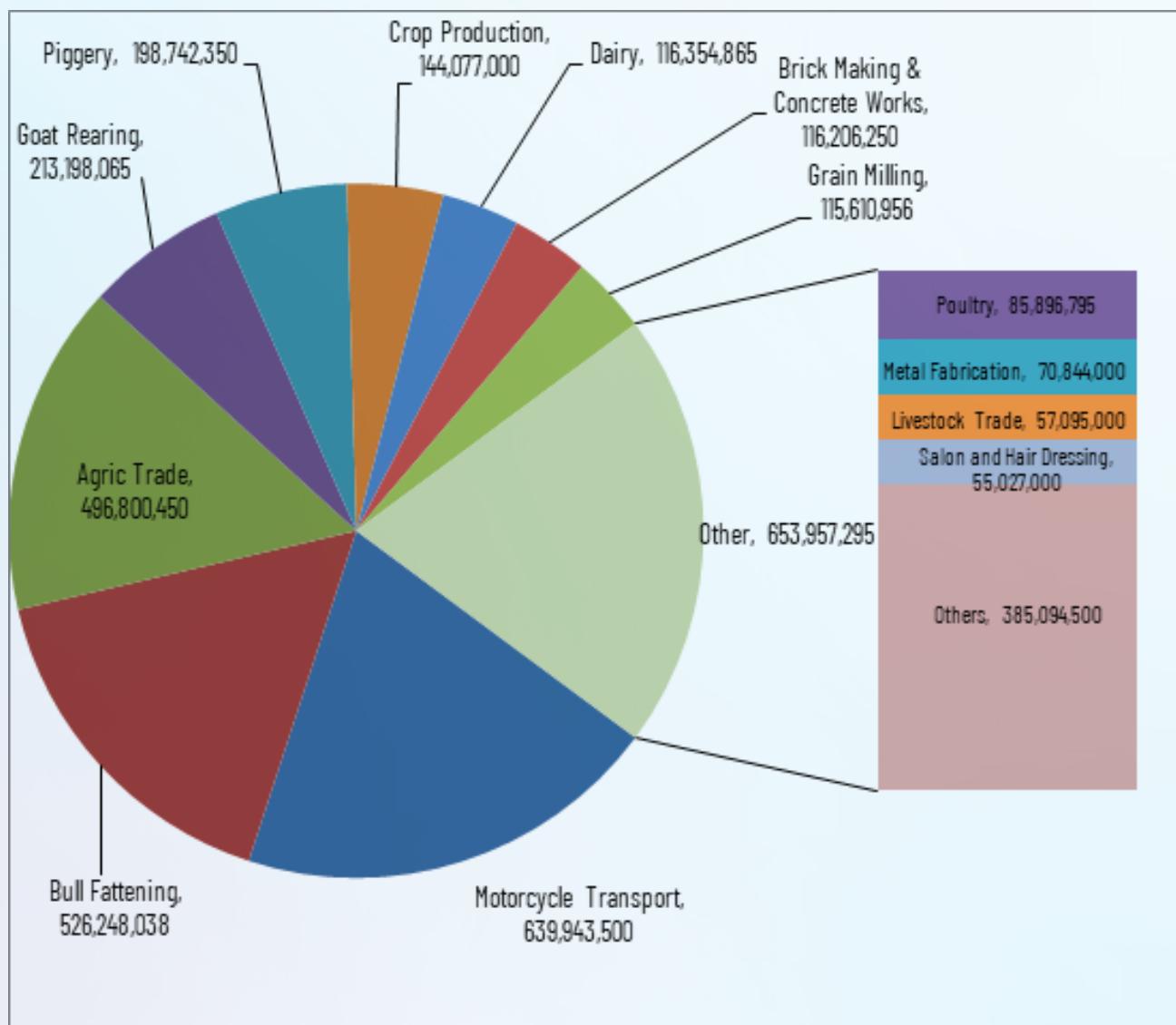
The major sectors funded are agriculture (31.8%), trade (28.6%) and services (23.4%) and these account for over 80% of the funding. Although there is no wide gender disparity in engagement of the youth, more women than men are employed in the Creative Industries (51%). Other sectors that engage a considerable number of women youths are Vocational Skills (49%), Health Care (47%), Trade (46%) and Agro Forestry (46%). The gender disaggregation indicates the programme reach to more women in areas where women are interested to participate in wealth creation programmes away from the relegation of women to homecare services.

The programme has also had challenges in its implementation ranging from leadership at local government level as well as negative mindsets among the youth. The Ministry of Gender YLP report 2022 indicates that "The lifeblood of YLP lies in funds recovery for it through which the philosophy of revolving funds is realized". During the quarter four FY 2022/2023 a total of UGX. 251,000,000 was recovered. The sluggish efforts towards recovery of funds is mainly explained by lack of operational funds to LGs resulting from the budget cut experienced by the Programme.

Cumulatively, UGX. 38,580,477,785 has been recovered and banked on YLP Central Recovery Account in Bank of Uganda. As a revolving fund, it was meant to reach out to more youth and create wealth, however the slow recoveries of the funds have affected the expansion to other youth and this is worsened by the negative mindset of politicization of the programme making follow up of the youth at local government not forthcoming with some local government officials claiming follow up of their children will make them runaway from the country.

Though challenges arising from some youth unwillingness to repay the funds, remarkable progress has been reached among youth that benefited from the programme. Challenges of non-repayment have been largely due to mindsets that its government money for the youth to share, political interference at local government level where youth are misled to believe that funds are not for repayment. This affected the ability to some extent to spread these funds to other youth since it is a revolving fund. The programme was benefiting youth and contributing to wealth creation among the youth as evidenced from reports from Ministry of Gender, Labour and Social Development and local governments.

Figure 9.1: Allocation YLP



According to the project completion report of Ministry of Gender Labour and Social Development 2022, the 8-years' experience of implementing YLP has demonstrated that: The un-bankable youth can be effectively targeted and supported to become bankable; The approach of providing revolving funds is effective, sustainable and builds a responsive culture among the beneficiaries and there is sufficient capacity within the Ministry and Local Governments to implement interventions of a financial nature to the same level of the private sector if not better.

These lessons can be scaled up under the Parish Development Model. The results demonstrate that the youth if supported have capacity to engage in wealth creation programmes thereby facilitating skills development which is a challenge among youth thereby enabling them contribute to national development and government ability to harness the demographic dividend. As the Parish Development model targets 30% of the beneficiaries being youth, if they are supported for skills development, financial literacy and income generating activities they will benefit from wealth creation. Government must deliberately target the youth to ensure successful implementation of the Parish Development Model and ensure the gains from the Youth Livelihood Programme are not lost.

9.4.4. Uganda Women Entrepreneurship Programme

The Uganda Women Entrepreneurship Programme (UWEP) is an initiative of the Government of Uganda aimed at improving access to financial services for women and equipping them with skills for enterprise growth, value addition and marketing of their products and services. UWEP, implemented as a Rolling Programme under the Ministry of Gender, Labour and Social Development (MGLSD), is intended to empower Ugandan women for economic development.

The Programme is designed to address the challenges women face in undertaking economically viable enterprises including the limited access to affordable credit, limited technical knowledge and skills for business development, limited access to markets as well as information regarding business opportunities. The programme is envisaged to increase participation of women in business development, increase their incomes, livelihood security and overall quality of life. The overall goal of the Programme is to empower Ugandan women to improve their income levels and their contribution to economic development. The Specific Objectives of the programme are; to strengthen the capacity of women for entrepreneurship development; to provide affordable credit and support access to other financial services to enable women establish and grow their business enterprises; to facilitate women's access to markets for their products and services; to promote access to appropriate technologies for production and value addition; to strengthen Programme management and coordination.

The UWEP has had positive impacts in the lives of the women and their contribution in society. Notably, women have been able to access credit to establish their businesses at zero interest. In addition, the Programme has provided an opportunity to Women to start and grow their enterprises and provide self-employment opportunities. Women have been able to receive training to improve their businesses and how to manage them better. The Programme has provided a platform to inspire and support women business ideas. The group approach has given Women an opportunity to improve knowledge and skill through mentoring each other. The greater involvement of the Women in mobilization, sensitization, prioritization and planning for their needs, implementation and monitoring and evaluation of Programme activities has created a sense of empowerment and confidence to take charge of their destiny. The skills provided through the basic training in financial management, entrepreneurship, business development, group dynamics and life skills, further strengthen the empowerment of the Women involved in the Programme. Women Economic Engagement where by 103,770 Women in 8,247 projects are engaged in self-employment through vocational trades and income generating activities financed under UWEP. Financial Inclusion wherein all the Women supported under the Programme, receive the funds through the Commercial Banks. A number of these Women groups had never had any dealings with the Banks before but are now holding savings accounts in the Commercial Banks. This is a great achievement in the promotion of financial inclusion among the vulnerable Women. Reduction of dependency syndrome whereby the revolving funds approach is making a significant impact in the mindset of the Women by inculcating positive values of hard work for a living, as opposed to the non-sustainable quest for free things (hand-outs). The reports received from the groups indicate that Women have been able to contribute to the management of their homes and contribute to school fees of their children and improve the quality of life in the home. The Women Entrepreneurship Programme registered better repayment due to women willingness to repay loans received. Given this track record and the fact that the Parish Development Model is targeting 30% women, the programme will contribute to wealth creation among women who are good at repaying back loans.

9.4.5. The Parish Development Model

Both the YLP and UWEP have been replaced by the Parish Development Model. According to the Ministry of Local Government, the Parish Development Model (PDM) is a multi-sectoral strategy to create socio-economic transformation by moving the 39% households out of the subsistence economy into the money economy, using the Parish/ward as the epi-centre for Development. PDM underlies the spirit of harmonisation of Government interventions for deepened decentralisation of service delivery. Every Ministry Department and Agency focuses on; delivering services closer to the People with Measurable results at the Parish level in order to ensure socio-economic transformation of the Subsistence Households into the money economy. This transformation requires organized, integrated, well-coordinated and results-based efforts. It emphasises the whole of Government approach in ensuring increased production, processing and marketing, infrastructure and service delivery at grassroots level.

The PDM is an NDP III implementation mechanism by both the State and Non-State Actors to achieve inclusive Development in a coordinated and participatory manner. According to the PDM Guidelines, the PDM has seven pillars; that is Production, Storage, Processing and Marketing; Infrastructure and Economic Services; Financial Inclusion; Social Services; Mindset change and cross cutting issues (Gender, environment, Disability); Parish Based Management Information System; and Governance and administration. The following minimum services will be provided under the PDM: Security: intelligence and defence infrastructure; Law and Order: police, magistrates; Education: kindergarten, primary, technical and secondary schools; Extension services: by crop, livestock, fisheries; Health Care: public and private clinics; Roads: District, Urban and Community Roads (DUCAR); Food Storage: fresh goods and dry goods; Food processing: cleaning, sorting, drying, packaging and milling; Power: hydro, solar and fossil fuels; Information and Communication Technology (ICT); data collection; Water: for domestic use and production; Financial Services: savings, credit, insurance, payment platforms.

According to the Ministry of Local Government 2022, the rationale for the PDM is that Common among the existing government wealth creation interventions is the control of the design, implementation, M&E and accountability by the Central Government. Moreso none of these interventions comprehensively and concurrently addressed the different aspects of development, production, markets, infrastructure, social services, financing, security, business development services.

In addition, much of the development agenda is currently being implemented through projects; an approach that has distorted policy, implementation & measurement of results. Projects have also undermined the goal of decentralization and created undesirable outcomes – persistence of poverty and subsistence, unemployment, inequality and regional imbalance despite budget growth. Projects have also failed the Local Economic Development (LED) policy implementation, intended to create wealth, increase household incomes and socio-economic transformation at lower LGs (where people are).

Despite this argument specific programmes targeting women and youth though did not reach all districts due to limited funding, remarkable positive changes in the beneficiary lives were realized. Given the multisectoral and wide nature of the PDM, there is an opportunity to test the ability to realise wealth creation for the population. The seven pillars of the PDM give a wide range of interventions to different sectors and if well implemented there is potential for positive change at the community level. However, the fact that the PDM has removed funding from programmes targeting specific people on an understanding that these groups will still be targeted through the Parish Development Model, needs to be carefully followed to ensure that the youth and women are not left out due to the fact that they may not be able to contribute to the SACCOS which is the basis for access to the PDM funds.

According to the PDM guidelines there is a component of Community Mobilisation and Mindset change which provides an opportunity for addressing mindsets that have been a challenge to realization of wealth creation. That component needs to be followed up to support the other pillars in the Parish Development Model. As PDM is implemented notable issues of corruption have been reported and civil servants arrested due to allegations of mismanagement of funds. The

design too has been challenged for being developed at the central government level replicating the top-down approach to programme design that has been blamed for attracting limited ownership from communities. There is need therefore to focus on bottom-up approach to identifying the challenges relating to wealth creation and addressing the needs of the communities for ownership of the PDM at community and local government level. The component of community mobilization and mindset change under the PDM will need to be overemphasized to ensure mindset change for wealth creation. The PDM pillar on mindset change seeks to;

1. promote intended community mobilization and engagement towards development programs.
2. promote positive cultural beliefs and norms which promote development.
3. inculcate and promote positive thinking towards personal, family and community development for improved quality of life outside the subsistence life.
4. Promote disciplined, committed and self-driven civil service teams for improved service provision.

As such, the activities, resources and results of this Pillar are integrated in the Programme Implementation Action Plans (PIAPs) as well as work plans and budgets of the various Ministries Departments and Agencies and Local Governments that contribute to the above programmes. The Pillar shall be the entry point for all pillars and shall follow a systematic approach of mentorships and counseling, mobilization of individuals and community members and identifying issues that affect them. The pillar puts people at center stage in decision making on issues that affect their lives and participate in determining their pathways out of poverty

The right mindset is a prerequisite for stakeholders to take practical steps that transform the way of working. This pillar focuses on adoption of the right way of thinking and opinions of public sector officials at all levels private sector players and communities.

The community members shall be empowered to take center stage in assessing their needs, identify livelihood options, prioritize livelihoods sources, leverage resources, and create sustainable solutions without leaving anyone behind in terms of development as per the sustainable development goals (SDGs), National Development Plan III(NDP III) and NRM Manifesto 2021-2026. The PDM therefore provides an opportunity to address mindset change for wealth creation if well implemented learning from the challenges of mindset change from earlier wealth creation programmes. The focus should not be on the financial inclusion pillar alone but all the seven pillars for value addition and its benefits as well as mindset change.

9.5. Mindset issues affecting wealth creation programmes

Government has been implementing several planning frameworks whose main objective has been transforming communities. The evaluations of those planning frameworks have all shown remarkable challenges ranging from negative cultural beliefs, gendered risks, to negative mindsets. It is against that background that the National Development Plan III identifies the Community Mobilisation and Mindset Change programme that seeks to address key challenges which include: general lack of responsibility and ownership of government programmes, a serious obstacle to development. This is attributed to low popularization and domestication of development initiatives, programmes and policies to lower levels; functional and allocative inefficiency; poor monitoring and supervision; and weak implementation. The uptake in appreciating and participating in community initiatives is attributed to passive, unproductive and a highly dependent population coupled with low literacy levels of citizens.

These particular challenges not only identify mindsets of implementers but also those of the communities and possible beneficiaries of government programmes. If programmes are introduced with biased minds, pessimism and politicization, then the interests of beneficiaries are lowered and so are their expectations.

The other mindset challenge is a dependency syndrome which is widespread throughout the country and at all levels. The fact that when people experience hardship of any nature they ask for government intervention even for things that are within their means to address. This makes them not believe in repaying loans from government programmes since they believe that government owes them anyway.

The provision of some of the programmes and sensitization was able to change this negative mindset as evidenced from the UWEP reports, an indication that from a gender perspective, when women are sensitized and understand the programme operations and requirements as well as their duties, they easily repay back loans obtained from government.

A high tendency among Ugandans to consider self-interest before anything. This negative mindset largely affects programme implementers and leaders engaged in selection of beneficiaries. Due to this challenge, the tendency is to bring on board relatives and friends rather than the eligible beneficiaries of government programmes. For instance, the COVID-19 response cash transfer that had local government staff as beneficiaries as opposed to the informal sector that were not working due to the lockdown in the country. In addition, there is corruption among both technical and political leadership during implementation of government programmes.

The habit of leaving things undone, failure to keep deadlines, poor time management among others; these are challenges that are seen from the implementers of the programmes making it difficult for effective implementation and monitoring and supervision of government programmes. Technical officers have a duty to implement government programmes and ensure effective mobilization and participation of the communities, however the challenges herein make implementation of programmes ineffective with limited participation of communities and poor maintenance of community assets arising from programmes thereby resulting into inadequate wealth creation among poor households.

Several behavioural barriers to the adoption of positive mindsets are cushioned by long years of social conditioning. This is demonstrated by harmful culture, beliefs and practices that promote stigma and discrimination, inability to live healthy and productive styles. For instance the belief that women should stay at home and perform household chores rather than engage in economic activities, and that if women work they become bigheaded and difficult to manage. This makes the mobilization of women inadequate especially if the people in charge of mobilization have such negative mindsets.

Participation of cultural and religious institutions in community development programmes has been inadequate, this has resulted in the population not participating in meaningful activities to generate household income. This is because the engagement through community mobilization has not specifically focused on engaging in productive activities but awareness on some community identified challenges such as HIV prevention and response. These cultural and religious leaders if meaningfully engaged can effectively mobilize communities to participate in productive activities thereby contributing to wealth creation among the communities.

Duplication of the community mobilization and empowerment efforts across sectors making it incoherent and disjointed. This contributes to lack of or limited coordination, ownership and sustainability for most public projects. The mandate of community mobilization is with the Ministry of Gender, Labour and Social Development and specifically at local government level, the CDOs lead the mobilization of communities yet the funding to the community based services department to facilitate them effectively mobilize communities is inadequate and sometimes nonexistent, this makes the officers rely on CSOs funds to mobilize communities and to engage in CSO work since government programmes do not provide for mobilization facilitation. This makes mobilization for wealth creation programmes, weak and affects their effectiveness among communities.

A weak community development structure has had a negative impact. This is a result of the lean nature of the structure given the multiplicity of roles they play at local government level coupled with inadequate logistical support to manage the assigned roles and wealth creation programmes have not been spared. For instance, each government programme always chooses a focal point person making them get added roles and responsibilities without reducing on the initial role and responsibilities. The heavy workload affects meaningful delivery of the functions and roles.

Limited community ownership of government programmes. Most government programmes are developed at the national level with limited consultation at the lower levels of government. This leads to communities believing that such programmes belong to government even when they are community assets, they are viewed as those of the funder of such assets, this leads to their lack of interest in the maintenance of such assets or infrastructure and wealth creation programmes have not been spared either.

To address these challenges, both state and non-state actors need to develop programmes, to ensure meaningful participation of communities through community engagement, training and capacity building of the government officers both at national and local government to effectively mobilize the communities but also ensure delivery of government programmes. This will ensure accountability of government and build a social contract between the citizens and government.

The National Development Plan III under the Community Mobilisation and Mindset Change Programme goal is to actively engage and empower families, communities and citizens to embrace national values and actively participate in sustainable development. The PDM has taken cognizance of this and includes a pillar on mindset change.

MGLSD(2020) Strategic Plan 2020, clearly indicates the contribution to the Community Mobilisation and Mindset Change Programme (CMMCP) through the Community Sensitization and Empowerment, Strengthening Institutional Support and Civic Education and Mindset Change Sub-Programmes. The objectives of these Sub-Programmes is to enhance effective mobilization of citizens, families and communities for development; to strengthen institutional capacity of central, local government and non-state actors for effective mobilization of communities; and to reduce negative cultural practices and attitudes. The results of the Community Sensitization and Empowerment Sub-Programme include: Informed and active citizenry; Increased household saving; and Increased participation of the diaspora in development processes. This is being funded through the PDM for effective mobilization and communities and awareness raising and attitude change focused interventions to ensure wealth creation among the targeted communities.

9.6. Leadership and governance issues affecting wealth creation

Government programmes are implemented through decentralized system of governance. Though these services are decentralized by law, the funding for the implementation of these services is from the central government and revenue collection at local government level is limited especially after the abolition of graduated tax, which curtails effective service delivery.

An assessment of the decentralization policy reveals that; Decentralization has not been effective in promoting Service Delivery. There is insufficient hard evidence to prove that decentralisation has been effective in promoting effective service delivery and local development. Autonomy and discretion of local governments has been weakened by central government controls over local revenues, leading to dependence on central transfers. Decentralisation has not achieved greater efficiency and has had limited impact in bringing quality and efficient services closer to the people. There is potential for decentralisation to create impact. Decentralisation is sustainable; however, it is a highly political process. The current education requirements for the different levels of leaders does not match with the capacity to articulate, debate and make decisions that the leaders need to make in line with their leadership position and the roles they play, however in the current legal provisions that has not been considered and decisions are informed by politics. The youth leaders have also been affected by this challenge especially at lower levels.

According to the report of UNDP 2021, it was acknowledged that it is impossible to effectively deliver public services and bring about socio-economic development without engaging the youth. Youth are the most important and dynamic segment of the population in any country. Across the world, especially developing countries, it is believed that contribution of youth could see enormous socio-economic development. For this to be achieved, it requires, however, to invest largely in young people's education, health and protect and guarantee their rights. This will achieve change of mindsets towards better service delivery. It is quite arguable that today's youth are tomorrow's innovators, creators, builders and leaders. But they need the required support to attain desirable knowledge and skills. The precursor for improved public service delivery is to have people with changed mindsets.

As noted elsewhere, the key to improved service delivery is shifting mindsets to begin with. No matter the environment, public institutions must foster efficient, transparent and accountable administrative services. Achieving this requires a significant change in the mindset of civil servants in institutions and at all levels. To this end, a whole mindset will be attuned to transparency, accountability and customer-orientation.

Leaders at all levels usually politicize the government programmes making their effective implementation difficult. The capacity of leaders at local government levels is inadequate to support implementation of government programmes given their diversity at the local government level as well as qualifications even at national level, yet they are key in decision making for wealth creation programmes.

According to the National Development Plan III, the citizens should be able to demand and receive accountability for results and value for money from the public servants. To facilitate this, there is need for clear systems to adequately measure performance for results in a transparent manner and access to timely, accurate and comprehensible public information. This promotes active communication between the implementers of programmes and the public and enhances the work ethic and attitudes of public servants as they are incentivised to deliver.

The National Development Plan III further notes that; Service delivery standards have been developed in Health, Education, Environment, Physical Planning and Water but these have never been approved by the sectors nor have they been certified by NPA and Parliament. The absence of service delivery standards makes it difficult for holding public servants accountable and assessing service delivery progress.

Ibrahim 2019, Governance and Leadership Journal reports that; Accountable government means that rulers believe that they are responsible to the people they govern and put people's interest above their own (Fukuyama, 2011,321.) Accountability is important for public sector; many African governments however are reported to have a low record for accountability. When public servants are able to respond to every issue arising from citizens and there is a degree for checks and balances, this could decrease the level of corruption. Building systems or accountable institutions in Africa is crucial because the traditions, values in Africa are quite opposite to modern concept of democracy.

The Annual Local government performance report 2021 indicates that, the overall performance for all LGs assessed in 2021 across the four dimensions improved from 36% in 2020 to 44% in 2021. Education was the best performed area at 53% having improved from 44% in 2020 followed by Health which improved from 35% to 44%, Crosscutting from 32% to 38% and finally Water and Environment performance areas from 36% to 40% over the same period. Education still performed slightly better than other areas because most LGs met the minimum conditions related to recruitment of critical staff (District/Principal Education Officers and School Inspectors); as well as environment and social safeguard issues.

The findings from UNDP Study on service delivery in Uganda, 2021 showed that the major causes of poor service delivery are councillor interference and political manipulation, corruption and lack of accountability and transparency, inadequate citizen participation, poor human resource policy, failure to manage change, lack of employee capacity, poor planning, and poor monitoring and evaluation.

The main strategies to improve service delivery were found to be increasing citizen participation in the affairs of the local authority and partnership with the community in service delivery, flexible response to service user complaints, offering value for money and ensuring that service users pay their bills on time, strategic public service planning sound human resource policy that includes capacity building and employee motivation, managing change, dealing with corruption and improving accountability, segregation of duties between councilors and management of the local authorities, and partnering with other players and outsourcing services

9.7. Conclusion

Wealth creation programmes have potential to transform communities if the negative mindsets affecting their effective implementation are addressed as well as leadership capacity is strengthened. Leadership at all levels is a critical component for building ownership of government programmes as well as mobilization of the communities to participate in government programmes for wealth creation. The challenges of corruption, absence of good governance and limited resources for enabling reach of government programmes to the population that need them, lead to inequalities across regions and should be addressed. Without deliberate planning from a gender and equity perspective, community mobilisation and mindset change programming, government cannot achieve national development. The Parish Development Model provides an opportunity to engage all key actors to ensure mindset change for wealth creation. In order for the PDM to be successful, the issues of mindset change, leadership and governance need to be carefully planned and executed for effective implementation drawing lessons for earlier implemented programmes.

9.8. Policy options and recommendations

Government should strengthen the implementation of the NDP III pillar on community mobilization and mindset change and develop a mindset change communication and advocacy strategy to comprehensively deal with mindset change for the service providers and well as the beneficiaries of the government programmes and general public, to build ownership and sustainability of interventions.

Government should strengthen the mobilization of communities and sensitization for mindset change with emphasis on involving communities in development programmes by ensuring that they are able to create employment, earn income and build aggregate demand. If wealth creation is achieved, there will be available disposable income, revenue collection from the buyers as well as businesses set up by different categories of the population.

Government should strengthen the Community Based Services Department at local government level and the Ministry in charge of the vulnerable and marginalized groups to ensure they are able to provide interventions for meaningful engagement of communities in wealth creation programmes.

Investment in youth as the biggest population in Uganda by building their skills and creating opportunities for economic activities will harness their potential and solve the high insecurity rates that threaten wealth creation and economic development. Ensuring the 30% youth in PDM implementation will contribute to that realization. In addition, strengthening the recovery of YLP funds to reinvest it among the youth to build synergies.

Invest in leadership and good governance, which is characterized by participation, rule of law, transparency, responsiveness, consensus oriented, equity and inclusiveness, effectiveness and efficiency, accountability. With good governance of the wealth creation programmes, the expected results will be achieved. This will also lead to review the qualification of leaders to strengthen leadership and governance. Governance and leadership are key aspects in ensuring successful implementation of government programmes.

For government programmes to be implemented effectively, Government should strengthen gender and equity budgeting capacity to ensure participation of all citizens especially the poor and vulnerable. Developing guidelines for equity is necessary in addition to strengthening the gender and equity planning and budgeting at national and local government levels is critical. This will ensure that wealth creation programmes do not only target active poor but identify those usually left out for meaningful engagement and participation in the programmes in line with Sustainable Development Goals.

Investing in underserved regions both in education and health will maintain a healthy population and build on human capital development. Investing in people helps in realizing a functional economy as there are less expenses on poor health. With human capital development, potential for wealth creation is enhanced.

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10 ANNEXES

Annex 1: Background characteristics of women in the study

	Karamoja	Kigezi		
Characteristic	Frequency	Percent (%)	Frequency	Percent (%)
Age in 5-year groups				
15-19	80	22	161	22
20-24	64	18	130	18
25-29	73	20	117	16
30-34	52	14	112	15
35-39	51	14	79	11
40-44	20	6	68	9
45-49	22	6	57	8
Marital status				
Never in union	77	21	201	28
Married	267	73	446	62
Not living together	20	5	77	11
Number of living children				
4 and below	254	70	586	81
5 and above	109	30	139	19
Place of residence				
Urban	74	20	120	17
Rural	289	80	605	83
Educational Level				
No education	239	66	89	12
Primary	104	29	436	60
Secondary+	20	5	199	28
Work status				
No	107	30	197	27
Yes	255	70	527	73
Religion				
No religion	12	3	1	0
Anglican	32	9	327	45
Catholic	289	80	327	45
Others	30	8	70	10
Total	363	100	724	100

Annex 2: Cross tabulation of the association between MCU and the selected variables

Cross tabulation of the association between Modern Contraceptive Use and selected variables						
	Karamoja			Kigezi		
Variable	Frequency	Using (%)	P-value	Frequency	Using (%)	P-value
Age (5year group)						
15-19	80	3	0.171	162	5	0.000
20-24	64	9		130	28	
25-29	73	4		117	43	
30-34	52	6		112	48	
35-39	51	5		79	45	
40-44	20	15		68	39	
45-49	22	4		57	17	
Age at first birth						
Below 18	58	11	0.037	105	45	0.408
18 and above	225	6		406	41	
Age at first cohabitation						
Below 18	104	12	0.002	185	45	0.056
18 and above	183	4		339	37	
Marital status						
Never in union	77	1	0.011	201	6	0.000
Married	267	7		447	44	
Not living with a partner	20	12		77	17	
Number of living children						
4 and below	254	5	0.086	586	29	0.020
5 and above	109	8		139	37	
Ideal number of children						
0-2 children	9	16	0.001	67	29	0.136
3-4 children	63	15		380	33	
5-6 children	277	3		251	29	
Non-numeric	14	2		27	11	
Place of residence						
Urban	74	5	0.832	120	43	0.036
Rural	289	6		604	28	
Education level						

Cross tabulation of the association between Modern Contraceptive Use and selected variables						
	Karamoja			Kigezi		
Variable	Frequency	Using (%)	P-value	Frequency	Using (%)	P-value
No education	239	3	0.001	89	24	0.260
Primary	104	10		436	32	
Secondary+	20	15		199	30	
Wealth status						
Poor	326	4	0.001	147	32	0.008
Middle	20	17		257	23	
Rich	17	18		321	35	
Work status						
No	107	4	0.345	197	17	0.000
Yes	256	6		527	35	
Religion						
No Religion	12	0	0.474	1	50	0.098
Anglican	32	7		327	35	
Catholic	289	5		327	26	
Others	30	15		70	26	
Visited a health facility in the last 12 months						
No	25	7	0.566	328	27	0.005
Yes	337	6		396	34	
Exposure to FP messages						
No	123	2	0.001	133	21	0.014
Yes	240	8		591	32	
Husband/partner's level of education						
No education	170	3	0.010	40	31	0.000
Primary	44	12		238	38	
Secondary+	53	15		168	54	

Annex 3: Binary logistic regression of modern contraceptive use among all woman (15-49) in Karamoja and Kigezi regions

Characteristic	Karamoja region	Kigezi region	Odds Ratio	95% CI
	Odds Ratio	95% CI		
Age				
15-19	1.00		1.00	
20-24	0.79	0.09-7.18	3.01	0.72-12.53
25-29	0.41	0.05-3.30	5.50**	1.30-23.34
30-34	0.27	0.01-6.82	6.26**	1.32-29.73
35-39	0.09	0.00-5.16	5.85**	1.17-29.28
40-44	1.25	0.04-43.87	4.42	0.74-26.28
45-49	0.32	0.01-13.51	1.88	0.34-10.36
Age at first birth				
Below 18	1.00		1.00	
18 and above	0.80	0.31-2.07	0.99	0.57-1.73
Number of living children				
4 and below	1.00		1.00	
5 and above	10.57	0.87-128.70	0.86	0.49-1.53
Age at first cohabitation				
Below 18	1.00		1.00	
18 and above	0.21**	0.07-0.60	0.44**	0.28-0.71
Place of residence				
Urban	1.00		1.00	
Rural	0.52	0.19-1.41	0.50	0.18-1.38
Wealth status				
Poorest	1.00		1.00	
Poorer	9.03**	3.01-27.14	1.26	0.21-7.43
Middle	6.32**	1.63-24.52	0.94	0.17-5.30
Richer	12.62**	2.76-57.71	1.20	0.18-8.16
Richest	30.53**	1.80-518.94	0.75	0.09-6.17
Woman's education level				
No education	1.00		1.00	
Primary	1.49	0.35-6.32	1.85**	1.07-3.19
Secondary+	2.26	0.35-14.66	2.33**	1.08-5.05
Husband's education level				
No education	1.00		1.00	

Characteristic	Karamoja region	Kigezi region		
	Odds Ratio	95% CI	Odds Ratio	95% CI
Primary	3.94	0.83-18.74	1.35	0.78-2.32
Secondary+	1.77	0.39-8.15	2.55**	1.39-4.69
Ideal number of children				
0-2 children	1.00		1.00	
3-4 children	0.32	0.03-4.12	0.94	0.44-2.02
5+ children	0.09	0.00-1.85	0.80	0.42-1.52
Non-numeric response	0.00**	0.00-0.15	0.38	0.10-1.48
Working status				
Not working	1.00		1.00	
Working	0.84	0.33-2.12	1.00	0.54-1.85
Exposure to FP messages				
No	1.00		1.00	
Yes	2.61	0.77-8.84	0.99	0.53-1.82
Visited health facility in last 12 months				
No	1.00		1.00	
Yes	0.09**	0.02-0.35	0.69	0.48-1.02

** Significant at the 5% level of significance

Annex 4: FP2030 Objectives

Objective 1: Increase equitable access and voluntary use of modern contraceptive methods for all women and couples. Uganda will implement a rights-based approach to FP that will encourage voluntary FP and limit coercion. In that respect, Uganda will promote access rather than use to promote the choice to use or none use. In addition, Uganda will implement a set of modeled high-impact practices (HIPs) that will help the country achieve an ambitious mCPR for all women.

Objective 2: Increase funding for adolescent sexual and reproductive health programs. This objective prioritizes adolescents because of the country's demographics. Financial resources are vital for adolescent programming and policy implementation. Focused allocation and expenditure on adolescent HIPs are stipulated in the National FP CIP II and School Health and Adolescent Health Policy.

Objective 3: Ensure Contraceptive Commodity Security. Uganda is in a process of developing its 10-year supply chain roadmap. The country has a fully resourced Quantification and Procurement Planning Unit (QPPU) and an alternative distribution system strategy to support the private sector. The public sector has commenced online order processing, and the computerization of the logistics management information system (LMIS) is ongoing. Contraceptive distribution innovations including Safeboda and numerous others are also ongoing. In addition, the National FP CIP II has a standalone strategy and interventions to increase access to contraceptive commodities. The Uganda FP2030 commitment will focus on contraceptive financial sustainability because the Government of Uganda is currently allocating less than 5% of the total contraceptive requirement of \$34 million USD per year.

Objective 4: Strengthen the policy and enabling environment for Family Planning. A favorable FP policy environment is the foundation for any FP program. Uganda has several sexual and reproductive health and rights (SRHR) policies that need to be finalized, hence the need to make it a priority for Uganda's FP2030 commitments.

Objective 5: Strengthen FP data use at all levels. There have been improvements in reporting rates, quality of data collection and use at the national level where the Ministry of Health (MoH) presents the monthly performance of FP programs based on District Health Information Software (DHIS) II data. However, there remains a challenge with FP data use at all levels starting at the community level. This commitment is meant to foster data use for decision-making and to complement the observed increase in reporting rates from health facilities.

Objective 6: Address Family Planning myths and misconceptions through evidence-based SBCC and advocacy. There are many bottlenecks to FP uptake from the demand side, however, the most consistent challenge to low uptake is the myths and misconceptions around FP. For the FP2030 commitments, Uganda is prioritizing addressing FP myths and misconceptions. The National FP CIP II will also address the other causes of low FP uptake and proposed social and behavior change interventions and HIPs.



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