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Department of Development Studies

**ACHIEVING EQUITY AND GENDER EQUALITY IN UGANDA'S  
TERTIARY EDUCATION AND DEVELOPMENT**

By

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## **DECLARATION**

I declare that **ACHIEVING EQUITY AND GENDER EQUALITY IN UGANDA'S TERTIARY EDUCATION AND DEVELOPMENT** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



DATE:16 DECEMBER 2019

SIGNATURE

GEOFFREY ODAGA

# **DEDICATION**

In loving memory of Mr. Raymond Ogwal, my Dad and mentor.

Your prints of love and teaching shall not be forgotten

## ABSTRACT

Grounded in feminist epistemology, the study focused on the concepts of location, social position, gender and Affirmative Action to assess the social phenomenon of inequality in the distribution of public university educational opportunities in 4 regions and 112 districts of Uganda. The study used district level data of a student population of 101,504 admitted to five public universities from 2009-2017, to construct the 'Fair Share Index' (FSI) as a measure of higher educational inequality. Based on the FSI, the Fair Share Equity Framework of analysis was created, developed, applied and used extensively in the study, to incorporate 'equity' as a 'third' dimension in the assessment of higher educational distribution in Uganda. The Education Equity Index (EEI) was computed for each of four regions and 112 districts of the country. The EEI was defined as the difference between the Fair Share Index (FSI) or population quota and the actual proportion of the student population allocated to a region or district of the country. The index measures the 'Fair Share Gap' in the distribution of higher educational opportunities from one region and district of the country to another, based on the changing configurations of population quota and the actual student population allocated over the years. It shows the extent of the gains or losses incurred in the distribution of public university education by a district over time, and the extent of inequality in access to public university educational opportunities as a resource in regions and districts of the country. The Fair Share framework defines, conceptualises, measures and incorporates the discourse of equity as a dimension of educational distribution in ways not previously reported. By so doing, the author addresses the puzzling complexities of the social phenomenon of inequality in higher education and in development, in ways not previously reported. The new methodology is based on the feminist Standpoint theory- the notion that the social phenomenon of inequality is socially, historically and culturally situated and that its investigation and analysis must be placed in the context of the location of the social phenomenon itself. On that basis, the Fair Share Equity Framework does not simply offer a perspective; it provides a rigorous and an innovative methodology, which simplifies investigation of the social phenomenon. In the entire study, the researcher endeavored to systematically illustrate the theoretical and empirical paradigms of the Fair Share Framework as a new contribution to knowledge and an important effort towards the greater goal for equity and gender equality in higher education.

The study found that social location and gender were the main factors in Uganda's public university educational inequality. Ninety-point-five (90.5) percent of the total student population was found in the top 20 per cent of districts of Uganda. Seven (7) out of every 10 students selected for undergraduate programmes were from three (3) districts; Up to 82 per cent qualified from schools located in five districts; and a single private high school accounted for as many students as the number that came from a total of 733 public schools. While half the population of women in public university education was in one out of ten colleges, eight of out of every ten were in two colleges. In the rest of eight public university colleges, men outnumbered women by a ratio of 8:2.

Owing to the district factor, the high school factor and Affirmative Action, gender remains the main factor in Uganda's public university educational inequality. The representation of women tended to be lower in fields where jobs have considerable national appeal but it was higher in fields where prospects, status and potential for future income, power and access to resources are considerably lower within the historical, social and cultural context of Uganda. Access and distribution criteria mainly favored students from the top districts and high schools in the country. Although Affirmative Action opened doors for more women in higher education, the doors that were opened were not necessarily for historically excluded. The programme tended to benefit primarily the most fortunate, failing to reach the most marginalised, the excluded and the hard to reach on grounds that it was implemented for competitive reasons.

In the distribution policies, systems and practices, emphasis was laid on the supply side rather than demand. In spite of the introduction of a district quota-based policy in 2005, the distribution system did not work for students from underprivileged schools in remote districts of Uganda. The majority of women and men who lagged behind originated from remote and disadvantaged districts. There was a significant binary divide. While the men occupied one section of the colleges, women were in the other section of the colleges. The benefit of Affirmative Action programme was limited to a specific category of women, from specific districts and a few top secondary schools in the country. Women faced considerable barriers, particularly in science education, due to the lack of effective policies to address college-based inequalities related to intake, and the transition from high school to higher levels of education.

In recent times, considerable emphasis has been laid on studies that assess the social phenomena of inequality from an income and wealth distribution or inputs and output dimensions. Building its foundation from the feminist theories of knowledge, the framework stands out, for its emerging perspectives on the concepts that constitute the notion of equity. It explores new discourses and provides a theoretical framework that can be deployed in fields of development to deconstruct the conundrum and address the complexities of inequality. It presents a rigorous and systematic approach; contributes to the theoretical and empirical relevance of the feminist Standpoint epistemology and to a scientific vision in the study of inequality in all fields of development.

When Uganda moved to universal primary schooling system, policy makers appear not to have anticipated the implications of this move for the country's secondary and higher education system. The higher education distribution system has thus continued to aspire to its original elite model. This is not because it is insensitive and irresponsible, but because it is not structurally ready to accommodate the upcoming burden of mass and universal primary and secondary schooling. This malaise has distorted the notion of equity and equality in the distribution system, shifting the developments in Uganda's higher educational distribution system rapidly in an opposite direction. The distribution of public university education in Uganda has thus become less of a central government function and more of a private affair, signaling a much deeper crisis – the degree to which admission policies, systems and practices may structurally deter the national equity, equality and empowerment agenda. This study dealt with the structural issues that influence equity and gender dynamics in the distribution of public university education in Uganda. It offers recommendations that address the failure of the national merit system in underprivileged schools in remote districts of Uganda.

As presented, the Fair Share Equity Framework is my own construct and innovation. It was inspired by 20 years of experience in development, working with seven major International Non Governmental Organizations (INGOs), as well as with local civil society groups and communities in Africa, Asia and Latin America. I was concerned with what appeared to be the sheer absence of methodologies that attempt to advance the application and use of the concept of 'equity' and 'Fair Share' in public policy; and in the investigation of the growing forms of

geographical inequality; particularly in regions and districts of countries such as Uganda, where access to development resources such as higher educational opportunities is significantly hampered by the lack of space due to the limited state's capacity for long term planning and inadequate tax-based models for financing of educational infrastructure. The study defines what constitutes 'equity' as a 'dimension' of educational distribution. It illustrates a clear gap between the government's attempts to increase access to secondary education and the status of access to higher education. It shows the pitfalls in the governance framework currently guiding the higher education system, which primarily benefits students from a few districts in the country. This perpetuates a system that rewards only the privileged.

The Fair Share methodology shows how the feminist Standpoint theory provides for the use of the feminist concept of social location in education; and in the understanding of how inequality in the distribution of higher education can be naturalised and legitimised in everyday life. It ascertains the nature of districts for which the distribution policy and system is most effective and the category of districts that lag behind. Its thesis is the notion that inequality in access to higher education cannot be corrected, without the synchrony between government's efforts in ensuring access to primary and secondary education and an open strategy to achieve equity in higher education across the entire country. A case is made, that in order to address the social phenomenon of inequality in the distribution of higher education in regions and districts of Uganda, the proportion of all members from each district, who have the minimum level of preparation to participate in higher education should be determined by a Fair Share Index. The Fair Share Index provides a rigorous perspective on the discourse of equity; a perspective, which simplifies investigation and contributes to the scientific vision of the feminist Standpoint empiricism.

### **Key terms**

Fair Share, Fair Share Index, Equity Index, Equity Classification, Equity Distance, Positive Equity, Negative Equity, Relative Equity, Equity Regulator, District Gap, High school factor, Access pipeline, and Secondary school systems gap, Higher Education, Affirmative Action, Gender.

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## **ACRONYMS AND ABBREVIATIONS**

CFG:	Cumulative Fair Share Gap
DEC:	District Equity Category
EG:	Equity Gap
EOC:	Equity Opportunity Commission
ER:	Equity Regulator
ESEI:	Education Social Equity Index
FAWE:	Forum for Women Educationalists
FS:	Fair Share
FSG:	Fair Share Gap
FSI:	Fair Share Index
NE:	Negative Equity
NEI:	National Equity Index
PE:	Positive Equity
RE:	Relative Equity
STVE:	Scientific, Technical and Vocational Education
UNESCO:	United Nations Education Scientific Organization
USA:	The United States of America
WB:	World Bank
IMF:	International Monetary Fund
SAPs:	Structural Adjustment Programmes
UN:	United Nations
MDGs:	Millennium development Goals
SDGs:	Sustainable Development Goals

## CLARIFICATION OF TERMS

**Governance:** This refers to the policies, systems and practices responsible for the distribution of higher educational opportunities in regions and districts of the country. It is central to the discursive trajectory of equity and equality in the distribution of education.

**The Fair Share Equity Framework of analysis:** This refers to a comprehensive set of tools that include the application of the concepts of Fair Share, Fair Share Index, Equity Index, Equity Gap, Equity Classification and Equity Distance to explain the phenomenon of inequality in the distribution of public university education.

**District Population Quota (PQ):** This refers to the actual percent of the district population, calculated as a proportion of the district population to the overall population of the country in a given year.

**Fair Share (FS):** The concept of Fair Share refers to the degree to which the distribution of public university student population in Uganda's districts is reasonable, relative to the districts' population quota.

**Fair Share Index (FSI):** This refers to the population quota of a given district of the country. It is an index, which measures the concept of equity, i.e. the degree to which the distribution of public university educational opportunities in Uganda is reasonable, relative to districts' population quota.

**Equity Index or Fair Share Gap (FSG):** The FSG accounts for equity differences in the distribution of public university educational opportunities among regions and districts. It is calculated as the difference between the district's Fair Share Index and the actual percentage of the district public university student population allocated to the district.

**The Cumulative Equity Index (CEI):** represents the total number of students to which each district would have been entitled over an eight-year period if student allocations were based on population quota.

**The Average Equity Index (AEI):** is a measure of the actual numbers of students missed by a

district over the years based on the gap between the actual proportion of allocation and the district population quota.

**The Equity Classification and Distribution System (ECS):** is a system used to group or cluster districts into three equity categories based on the range of the Equity Gap or Equity Distance calculated for each district.

**The Equity Distance (ED):** This refers to the variation in the levels of relative ease or difficulty of access to a public university educational opportunity from one district to another.

**Positive Equity (PE):** PE refers to districts whose equity indices or gaps were positive.

**Negative Equity (NE):** NE refers to districts with a negative Equity Index or gap.

**Relative Equity (RE):** RE refers to districts that fall within an acceptable range of Equity Gap of plus or minus 30.

**Equity Regulator:** Refers to an index used to determine the lowest and highest limits of AEI that defines each of the three equity categories above.

**The District Gap:** A phenomenon that presents in districts in which public university educational gaps are most concentrated.

**The District Social position:** The significance of each district in the public university educational distribution system due to its location in the country:

**National Equity Index (NEI):** An index used to prioritize districts, based on their equity distance to public university education, to identify areas where more prominent forms of social preferences or policy are needed to address the Equity Gaps and imbalances identified in the distribution of the public university educational opportunities by geography and demography of the country.

**High school factor:** The high school factor refers to a phenomenon in which the top secondary schools in the country influence the distribution of public university educational opportunities.

**The Access pipeline:** Refers to a hierarchy of the secondary school system that dominates the public university educational distribution system or the flow of student population from primary and secondary schools to universities and tertiary institutions.

**The secondary school systems gap:** The school-systems gap represents a pattern of repeated intergenerational choices of underclass schools by poor parents and students in marginalized communities. This leads to a vicious cycle of cause and effect, which condemns poor communities to a lower quality education, with less opportunity for higher education and social mobility.

**Gender Parity Index (GPI):** GPI is defined as the quotient of the number of females by the number of males enrolled in public universities in a given academic year.

**Equity:** The term equity is used to refer to fair share in the distribution of benefits of development for everyone, irrespective of gender, location or status.

**Gender Equality:** Refers to an institutional environment in which policies, systems and practices are built on a culture that respects and rewards gender differences in the development process.

**Affirmative Action:** This term refers to policies, systems and practices aimed to address discrimination or disadvantage associated with past and present, committed against women and minorities based on social, historical and cultural context of a given society.



# CHAPTER ONE

## INTRODUCTION

### 1.1 Orientation and background to the study

The distribution of education is an extremely fundamental concept for welfare consideration and development (Vinod, Yan & Fan, 2001). Equity and equality in educational distribution constitutes preconditions for individual and community productivity that provide the ability to rise above poverty (Sen., 1980). According to the World Bank, if people's abilities are normally distributed, inequality in the distribution of education causes significant welfare losses to the entire nation (Dworkin, 1981). The uneven distribution of education creates a collective welfare and development problem because the collective benefits of education depend both on the average level of an individual's education but also on how equitably it is distributed across the country's population (Vinod et al., 2001).

The benefits of educational distribution to welfare and development are well documented. Equity in educational distribution leads to equity in the distribution of the benefits of health. This includes a reduction in HIV/AIDS. It empowers girls and women and increases potential for household income growth and national development. It breaks the cycle of poverty. When there is equity and gender equality in access and distribution of quality education, the entire nation benefits from a ripple effect of social mobility that influence one generation to the next. Educational distribution is also a critical lever for other development objectives. It contributes significantly to the realization of United Nations (UN) Sustainable Development Goals (SDGs), in particular, goal one-poverty eradication, goal four-quality education, goal five-gender equality, goal eight-decent work and economic growth, goal ten-reduced inequality, goal 13-climate action, and goals 16 and 17-peace, justice and strong institutions respectively. Therefore, equitable educational distribution must be an essential part of every country's development strategy.

The distribution of higher education as a resource remains a significant barrier in Africa. This is also the case in Uganda. The Uganda Ministry of Education states that the implementation of its Gender and Education Sector Policy (MoES, 2009) made the education sector register important

progress in promoting a more equitable access to education (MoES, 2012). The Ministry claimed that, by 2014, Uganda had achieved gender parity in primary enrolment. It increased enrolment in secondary schools from 54 per cent for boys and 46 per cent for girls in 2008 to 53 per cent for boys and 47 per cent for girls in 2014 (MoES, 2016). While completion rates for primary schools increased from 47 per cent in 2008 (boys 50 per cent and girls 44 per cent) to 72 per cent for both boys and girls in 2014, pass rates at primary level examination was 86.2 per cent in 2014, from 65.3 per cent in 2002. Although the sector registered gains in gender equality, wide gender gaps are still reported at secondary school level. In 2014, females constituted only 46.9 per cent of secondary school enrolment. Only 34 per cent of females and 45 per cent of males completed senior four (Grade 11) while 25.9 percent females and 33.6 percent males transitioned to senior five (Grade 12). Performance index for Uganda Certificate of Education (UCE) was 39.7 per cent for females and 44.5 per cent for males in 2014, with wide regional disparities due to vulnerability in education, which varied within regions and districts (MoES, 2016).

Sub-Saharan Africa (SSA) has the lowest access rate in higher education, globally, with critical equity and gender disparities between and within countries (Kotecha, Wilson-Strydom & Fongwa, 2012). While the global average enrolment for male and female was 19 per cent in 1990 and 26 per cent in 2000, access in sub-Saharan African (SSA) was about 5 per cent (Verspoor, 2008; World Bank, 2009; UNESCO, 2002; 2003; 2005; 2012), in contrast to over 70 per cent in highly industrialised (OECD) countries. Those who argue that the situation is much better in Africa today than it was are of course right. Current figures for Africa have indeed doubled those of 1990 of 2.4 per cent. The stark reality remains that SSA dismally lags behind all other developing regions in terms of higher educational access. For instance in Latin America and the Caribbean, gross enrolment ratio was above 30 per cent. In SSA, the highest enrolment was in Mauritius, with 17 per cent. With a combined student population of 1.3 million and gross enrolment ratios of 15 per cent and 10 per cent respectively, Nigeria and South Africa accounted for more than half of all enrolments in sub-Saharan Africa (Kotecha et al., 2012; MacGregor, 2008; 2009). There were just over a million higher education students in the 15 countries of the Southern Africa Development Community (SADC) in 2012, with more than 70 per cent in South Africa alone (Kotecha et al., 2012). According to Kotecha, around 57 700 were master's students and 10 600 were doctoral students. Undergraduate and postgraduate registrations were

substantially low through much of the region, influencing significantly on the availability of high-level skills. Annually, just over 180 000 degrees are awarded within the SADC region, around 1 300 at doctoral level. The success rate was 15 per cent for undergraduate programmes, 40 per cent for postgraduate diplomas, 20 per cent for master's degrees and 13 per cent for doctoral degrees. Among 15 SADC countries, including Angola, Botswana, DRC, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe, South Africa enrolls by far the largest number of students in higher education, followed by the Democratic Republic of Congo (DRC), Tanzania, Mozambique, Angola and Madagascar. In terms of gender, 51 and 49 per cent of students in 15 countries in the region are males and females respectively (Kotecha et al., 2012). When this regional aggregate is analysed, major gender gaps are revealed at provincial and district levels as well as in the major fields of study. At national level, more females are enrolled in countries such as Lesotho, Mauritius, Namibia, South Africa and Swaziland. The rest of the SADC countries enroll more male students. In the Democratic Republic of Congo (DRC), seventy one (71) per cent of students are male. In Madagascar, up to eighty-three (83) per cent are male students (Kotecha et al., 2012).

The significance of the notion of equity in the distribution of higher educational opportunities as a resource cannot be overemphasized. Equity in educational access, outcomes and opportunities determines access to jobs, employment and income. It is a fundamental concept for development effectiveness. At the same time, it is as much of a fundamental challenge in Uganda as it is in the rest of SSA. When it comes to the effectiveness of development policies in dealing with inequity, as a region, SSA managed to reduce poverty by an average of only four percentage points from 1991 to 2018 (see African Development Bank's report of 2018). At the same time, there were countries that included Uganda, which managed to reduce poverty by half (World Bank, 2009a; 2009b). Taking note of the mixed nature of results across the region, the African Development Bank concluded that countries in which growth was more inclusive also achieved better results in poverty eradication. These countries implemented inclusive social policies, systems, and programmes to benefit their populations. The examples provided by the African Development Bank in its 2018 report imply that the conundrum of poverty and inequality is not a result of the lack of resources parse; it is in the way resources is governed—in particular, the absence or the

lack of the notion of equity in the policies, systems and practices responsible for its distribution. This appears to be the case in Uganda (World Bank, 2006; 2012b). While poverty rates in the Central region of Uganda dropped from 24 to 12 percent, it rose significantly in Northern Uganda from 29 per cent in 1990 to 38 percent by 2010, with Northern and Eastern regions today being home to two-thirds of all Uganda's poor. This is a 14 per cent increase from the baseline of 1992 (World Bank, 2011a).

Towards the end of the 90s, access to higher education was increasingly recognized as the main tool to overcome social injustices and promote development. As a result, the United Nations (UN) made the provision of quality education for all, the backbone of the 2000 Millennium Development Goals (MDGs) and the 2015 Sustainable Development Goals (SDG). In the SDG framework, the UN states that it will “by 2030 ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university” (UN, 2015). This is in keeping with the 1948 United Nations Universal Declaration of Human Rights which states: “higher education shall be equally accessible to all on the basis of merit” (UN 1948, Art. 26, paragraph 1) and the United Nations 1976 International Covenant on Economic, Social and Cultural Rights which, commits to equal access to higher education “on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education” (UN 1976, Article 13 2c). It is higher education, so it is argued, which guarantees that the educational achievement of every citizen contributes to the welfare and development of the entire society. For this reason, studies show that equitable distribution of education is preferred to a redistribution of existing assets (Dworkin, 1981), because education builds new assets and improves social welfare by its spillover effect. It is the only investment, which does not make anyone else worse off (Vinod T, et al, 2001). Investing in equal education is a win-win policy framework, which has attracted the support and attention of all developed and developing countries alike (Arneson, 1989; Cohen, 1989; Roemer, 1993).

Moreover, it was not clear how the policy instruments of the Uganda's national merit system, the Affirmative Action of 1991 and the district population quota of 2004 policies have addressed the complexities of inequality in higher education and combated the structural challenges that impeded the long-term potential of the benefits of higher education in elevating the status of

disadvantaged and marginalised districts. This conclusion was made in the context of studies, which show that regional differentials in educational access, outcomes and opportunities in Uganda have continued to grow (Escobal, Javier and Torero 2005). The study sought to explore policies, systems and practices that have the potential to increase levels of educational access, outcomes and opportunities in regions of Uganda that lag behind. According to a World Bank study, by increasing the level of education in regions of Uganda that lag behind to that of the Central region, poverty can be reduced by 9 and 26 percent points in rural and urban areas respectively (World Bank, 2012b). This requires that the progress already achieved in access to primary education throughout the country be sustained; by eliminating the dropout phenomenon, and substantially increasing completion rates to address the issue of low transition from primary to secondary school and higher levels of education.

According to the feminist Standpoint empiricism, access to resources is theorized as “grounded in historical socio-economic context” (Mamo, 2005: 358) and “varies according to particular Standpoints” (Intemann, 2010: 783). In the context of this theory, it is postulated that social location and social position may afford some benefits of access to resources such as public university educational opportunities, to some epistemic groups; and that this epistemic advantage is specific to one’s Standpoint, defined as their location or social position (Intemann, 2010: 784). In Uganda, gender, district of origin, district population quota, high school and Affirmative Action are specific Standpoints, given that each represents a core element of the criteria used for the distribution of public university educational opportunities. In the context of the Standpoint Theory, it is theorised that each of the above five elements may systematically shape and limit access to public university educational opportunities. This theorisation leads on to the question: How does the location of students’ district of origin and district of high school influence the distribution of public university educational opportunities in regions, districts and public university fields of study in Uganda? What is the role, meaning and implication of Uganda’s districts, population quota, student’s high schools, gender and Affirmative Action as Standpoints for access to public university educational opportunities in regions and districts, in the context of public policies, systems and practices responsible for distribution of Higher education?

## 1.2 Problem statement

According to Ball (1990), the distribution of public universities in Africa was politically motivated. They were established in regions according to political affiliations (Ball, 1990; Langa, 2016; Varghese, 2004; Edigheji, 2009). Until the late 90s, state control of public institutions was the official policy. This blocked the development of private universities and other institutions. In fact, state policies were crafted deliberately to cripple the proliferation of private institutions in favour of public ones (Varghese, 2004: 12). This hampered the goal of equity and equality in knowledge production (Sall, 2004). However, there was also the politics of neoliberalism. For much of the last three decades, neoliberalism interfered with the development of public universities and tertiary education in Sub Saharan Africa (SSA). In a study on rates of return on higher education (ROI), the World Bank concluded, along with the International Monetary Fund (IMF), that higher education in Africa was more of a private good than a public good and that it was not a priority for public investment (Kotecha, 2012; World Bank, 2009; Brock-Utne, 2000). This study motivated policies that led to massive cuts in higher educational expenditure across the region during and after the Structural Adjustment Programme (SAPs), with IMF conditionality being imposed to limit growth in public expenditure in higher education to no more than three per cent annually (Kotecha *et al.*, 2012; Varghese, 2004). This backdrop led on to the question of what policies, systems and practices are responsible for the distribution of public university education in Uganda? How do the policies, systems and practices of distribution account for the conundrum of inequality in public university education in regions and districts of Uganda?

Educational inequality is a major development conundrum in the region. In 11 of 26 Sub Sahara African (SSA) countries where net secondary school enrolment was under 50 per cent in 2012, Uganda was ranked number sixth. Its net secondary school enrolment was 26.87 per cent (World Atlas, 2019). Uganda's performance was dismal at best, measured along countries such as Mozambique (26.05), Chad (22.79), Niger (18.31), the Central African Republic (17.79) and Somalia (7.35) (World atlas, 2019). Other than the war torn Somalia, Uganda's performance was the worse in the whole of the eastern arm of Africa. In fact, there was no other East Africa country in this group but Uganda. This is the case as the quality of learning is too poor and the

duration of compulsory schooling too short to create the mandate for government and communities to invest adequately to ensure children remain in school long enough. The UNESCO World Atlas (2019) shows that Uganda is among countries in the region where duration for mandatory schooling is too short. While mandatory schooling ends when children are only 13 or less in 20 countries in SSA, it is only six years or less in 14 other countries.

Then there is the challenge of limited long term planning and under investment in education. As studies conducted in Uganda show, this explains regional disparities in educational access, outcomes and opportunities, resulting from the lack of equitable human capital investment and under investment in public infrastructure (Deininger, Klaus and John Okidi, 200; Escobal, Javier and Torero 2005). While gross enrolment rate at primary has reached over 90 per cent nationwide, an average of less than three in 10 Ugandans make the transition that they need from primary to secondary school. Only about 5 per cent of any age cohort has access to higher education (MoES, 2019). Again, this is among the lowest in the East African region. Although the education system is, the only infrastructure governments have to transform society in a fundamental way, the fact that access to secondary and higher education in Uganda remains at an elite stage is a major policy issue.

Moreover, the situation in higher education is similar across the rest of Sub Saharan Africa (SSA), where access remains at an elite phase, with the biggest challenge being, how to transform the system from elite, to mass and universal access phases (Trow, 1973; 2007). With a combined student population of 1.3 million, and net enrolment of 15 per cent and 10 per cent, Nigeria and South Africa is home to about 50 per cent of all higher education students in the region. The two countries accounted for more than half of the student population in SSA by 2012 (Kotecha et al., 2012; MacGregor, 2008; 2009). In Uganda, the challenge is much deeper; the majority of the population only completes primary school. On average, only three out of every 10 make the transition that they need from primary to secondary school. At tertiary level, only 5 per cent has access to tertiary education (World Bank, 2012a). This is in sharp contrast to an average of 8 per cent in SSA, 76.6 per cent in North America and Western Europe, 71.4 per cent in Eastern Europe, and 22.8 per cent in South Asia (UNESCO, 2014; World Bank, 2009; Schofer & Meyer, 2005; Marginson, Schoole & Sawir, 2011; 2016a; 2016b; 2016c; 2014; McCowan,

2007).

Throughout the region, a significant number of applicants are left out each year, due to a lack of space (Kotecha et al., 2012; Kariwo, 2007; Carnoy et al. 2013). According to Kotecha and others, universities in SSA receive up to seven to ten times more applications than the number of places available (Kotecha et al., 2012). The lack of space is attributed to the lack of state capacity for long-term planning and tax-based models of financing of educational infrastructure (Oketch, 2016). This runs across the entire region. Of 60 000 to 70 000 secondary school students who qualify each year for higher education in Uganda, only about 35 per cent (25 000) find places in higher educational institutions (NCHET, 2018). Of these, the government sponsors about 4 000 (16 per cent) each year, to eight public universities. This implies a greater majority of qualified students who meet the first criteria are denied access. This is due to disadvantages associated with their backgrounds, i.e. where they come from and where they go to school. In other words, lack of equity in the distribution system, is at the heart of the issue. This is highlighted in a study by Barr (2004), which identified equity as a major gap in the higher educational distribution system. To be clear, Barr (2004) points out from the onset; that equity is not free higher education. It is “a system where no one who meets the first criteria, is denied a place in the institution of their choice just because he or she comes from a disadvantaged background” (Barr, 2004 p.266). By so doing, Barr identifies the need for equity-based approaches in higher education, given the challenges that developing regions face in the distribution of education.

Literature shows that as higher education expands from elite to mass and universal access stages (see Trow, 1973); access tends to benefit the elite (Shavit *et al.* 2007). This is confirmed in Uganda, where inequality in the distribution of educational access, attainment and opportunities was identified as unequal across regions of the country (World Bank, 2012b). Due to growing levels of regional disparities in educational access, outcomes and opportunities, poverty and inequality is reported to have increased significantly between 1992 and 2009/10 (World Bank, 2012), particularly in the Northern region of Uganda where a larger section of the population was left behind (Escobal and Torero 2005; Christiaensen, Demery and Paternostro, 2005). This is demonstrated in Deininger and Okidi (2003) as well by others, who found that, while the Central region of Uganda led in access to educational access, outcomes and opportunities, the Northern

and rural areas were generally lagging behind (Deininger and Okidi, 2003; World Bank, 2009b).

In a study by Gaddis (2010), the same issue is addressed. Gaddis (2010) noted disproportional levels of regional differentials in human capital investment and infrastructural development and called on Uganda to address inequality in the distribution of educational opportunities, particularly in regions that lag (Gaddis, 2010). Likewise, others have also noted that Uganda should focus on bridging the gap in human capital development, as well as tackle gross under investment in physical infrastructure, especially in regions that lag behind (Escobal, Javier and Torero 2005). Similar attention to equity in higher education has also been drawn by studies conducted elsewhere (Ilie Rose, 2016; Salmi and Bassett, 2014; UNESCO Institute for Statistics, 2014; Chien and Montjourides, 2016; Chin-Shan & Cheng, 2012). Inspired by gaps in policy, systems and practices and their effects on the conundrum of inequality in the distribution of public university education, the study chose to make a case for policy change, in the context of the growing levels of inequality in access to higher education.

In 2004, the government of Uganda acknowledged the need to adopt a more equitable system for public university educational distribution. This was in response to concerns that the national merit system was not equally rewarding to students who sit for their national entry examinations in disadvantaged schools located in remote areas of the country. With effect from 2005/2006 academic year, 25 per cent of all government sponsored public university educational opportunities was to be allocated through a district population quota-based system. The system required that districts' share of the student population be aligned with population quota, with preference given to those applicants who sit for national entry examinations in schools located in their home districts. The quota system was an important effort towards equity and equality in higher education. It incorporated 'district' of student qualification as a constituted category in the admission criteria for the first time. The policy was, to ensure the benefit of higher education apply to students in remote and urban areas of the country equally. It was to address concerns, which had emerged over geographical forms of exclusion in higher education, which other studies conducted elsewhere, also identify (McCowan, 2016b; 2012; 2007). Following more than a decade's worth of experience in the implementation of the district population quota based policy, the study sought to examine if and how the policy has ensured that the benefits of higher

education apply to students in remote and urban areas of the country equally.

One of the most common methods used in the assessment of the distribution of education is the education Gini. The education Gini, applies an income Gini coefficient index as a measure of inequality in educational distribution (Barro & Lee, 1993). It relies on data from national household surveys to assess the distribution of education based on a comparison between levels of educational attainment versus income and wealth distribution. This traditional approach has several obstacles (Thorbecke & Charumilind, 2002). Firstly, most developing countries do not have regular and reliable data on household and individual surveys, particularly on the distribution of household income and educational attainment (Galbraith, 2018). Secondly, Barro and Lee (1993) in their Education Gini coefficient approach divided their study population into seven categories based on levels of education. The categories ranged from no schooling (or illiterate) on one hand of the scale, to complete tertiary on another. These seven categories (Barro & Lee, 1993) do not represent the special characteristics of the concepts of location, social position, gender and Affirmative Action, which this study embeds and seeks to explore. The approach does not focus on 'equity' as a key dimension of educational distribution.

Literature was not available on studies that feature population quota in regions and district of Uganda, or anywhere else in the distribution of higher education; and which attempt to apply the use of population quota systems as a measure of inequality in the distribution of public university educational opportunities. But in studies on gender inequality in higher education in general, demographic features, such as parental level of education and family size do feature, as major factors that have influenced women's education and accounted for gender egalitarianism in higher education around the world. The higher the parental or inter-generational level of education, the greater it appeared, were the chances for women in higher education in economically advanced countries. This is well demonstrated in studies conducted in the US, Europe, Japan and South East Asia (Goldin., Katz and Kuziemko, 2006; Dryler, 1998; Buchmann and DiPrete, 2006; Edwards and Pasquale, 2003).

Moreover, there was a large group of studies that focus on gender inequality in higher education; but with preference on areas where women are considered to be most lagging behind (Le Doeuff, 2003). This included studies, which focus on topics such as faculty demography (Bettinger and

Long, 2005), gender differences in leadership and in pay (Blau, and Kahn, 2000) and gender income gap (Bobbitt-Zeher 2007; Eurydice, 2007). Then there is the tendency for studies to view the issue of gender inequality in education from the lens of social class, (Brown, 1999; Bynner and Joshi, 2002; Byrne, 2005; Meen *et al.*2005; Mokgaetsi, 2009). For this reason, much emphasis in literature was laid on disparities in social, cultural and historical context of women's education (Brown, 1999; Bynner and Joshi, 2002; Byrne, 2005; Meen *et al.*2005).

Against this background, the study developed the Fair Share Equity Framework as a methodology to bridge the gap in knowledge and contribute towards the greater goal for equity and gender equality in higher education and development. The Fair Share Equity Framework incorporates 'equity' as a 'third dimension' of educational distribution. This marks a significant departure from the conventional input and output approaches to educational distribution; addressing the puzzling complexities of inequality in higher education and bridging research gaps in ways, which the conventional input and output dimensions have not. Applying the framework using data from 1178 high schools and 112 districts in Uganda, the study explores if and how 'social location' counts, in the understanding of the social phenomenon of inequality in the distribution of higher education. It addresses the question of winners and losers and ascertains the nature of districts, high schools and population groups for which the distribution policy, system and practices of the national merit system, district population quota and Affirmative Action are effective or harmful.

The methodology provided the theoretical framework to assess the efficacy of the three major policy prescriptions developed by Uganda in the 90s and 2000s. Did the Affirmative Action and the district population quota based-system shift the needle on the direction of Uganda's higher educational distribution system towards the goal of equity and gender equality? It is in the above context that the Fair Share framework intended to shade some light on; (a) how policies, systems and practices may perpetuate educational inequality; (b) the extent to which the absence of the notion of equity may have obstructed the desired aim of the country's national merit system and the 1.5 bonus intervention policy of the Affirmative Action programme. It addresses the question of fairness in access to higher education (Meyer, Chankseliani & Uribe, 2013); promotes the pursuit for higher education as a public good and draws attention to the obligation of state policy

to reconcile the notion of merit with equity, especially in the distribution of higher education, all for the greater good and development of the entire country (McCowan, 2016a). The fair share framework, offers a methodology that incorporates ‘equity’ as a ‘third’ dimension of educational distribution. It can be applied to define what constitutes an inclusive educational distributional system; tackle the puzzling complexities of inequality; combat the structural challenges that impede the long-term potential of the benefits of education to development and rectify a long-standing nature of inequality in educational distribution.

The introduction of the district quota system in college admission in 2005 followed that of the ‘‘dual-track’’ model (Court, 1999). The model was introduced in the 90s, to address the crisis of financing for higher education in the country. Under the dual track system, while a small number of students (about 3,000 annually) are selected on state sponsorship based on a highly competitive national merit formula and 1,000 through a limited population quota-based policy; another group, usually three to four times bigger, are enrolled as privately sponsored students. The impact of the dual track system had been studied, and was found to be swift. It effectively transformed state owned universities in Uganda from ‘public utilities’ to ‘enterprises’. According to the World Bank, its impact on the Uganda’s higher education system was ‘revolutionary’ (Court, 1999). By 2016, seventy per cent, of those admitted in public universities paid fees, compared to almost none in 1999 (Okech, 2016). The ‘revolution’ appeared to have given rise to a new set of challenges-the complete distortion of the notion of equity and equality in the national merit system; with the majority of students admitted qualifying from the top high schools located in a few districts of the country. Although the ‘high school’ phenomenon had become a much bigger issue with the advent of the dual track system, little had been studied or was known, regarding its meaning, function and implication in the understanding of the social phenomenon of inequality in educational distribution. This study sheds light on how the high school factor, as a major aspect of Uganda’s higher educational distribution policies, systems and practices may produce, reproduce, naturalise and legitimise differential inequality in the distribution of higher education in regions and districts of Uganda.

Prior to dual track and the district population quota based systems of distribution, a gender-based Affirmative Action policy had earlier on; been incorporated into the admission practices of

public universities in Uganda in 1990. Following this incorporation, Ugandan women became entitled to 1.5 bonus intervention points for public university admission. From 1991, it became mandatory for all public universities to consider complementary 1.5 bonus intervention points in assessing the eligibility of qualified women for public university admission. This was the first major effort by government for greater inclusion of women in Uganda's tertiary education system. The policy aimed, to ensure women are represented in equal measure with men in all fields of study critical to economic growth and development. So, what happened to women's representation in public university education in Uganda since Affirmative Action programme was introduced? How are men and women represented by career fields in public university education in Uganda? What would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme? As far as we knew, no studies had attempted to address these questions. Studies conducted elsewhere had shown that Affirmative Action promoted equity and equality in higher education (Bagde, Epple & Taylor, 2016; Bertrand, Hanna & Mullainathan, 2010; Jayal, 2015; Deshpande & Zacharias, 2013). There was evidence from studies done elsewhere that, Affirmative Action corrected the effects of specific forms of discrimination (Alon, 2011; Estevan, Gall & Morin, 2018), most especially in public university colleges and fields of study. We were also aware of the fact that women's representation in public university education in Uganda had risen exponentially over the last two decades. What we had to seek to examine was if and how Affirmative Action policy has worked since its inception 27 years ago; the fields of study for which it worked best or did not work well and why, to make the case for change in the policy instruments, as it were, so that equity and gender equality can be achieved across the entire country. Moreover, it was unclear if Affirmative Action programme has actually addressed the historical injustices in higher education for which it was intended. It wasn't at all clear, if and how the policy promoted access for women in all aspects of public university education in Uganda; and if so, by what extent? Although the policy addressed gender as a factor, we knew that there were potentials for gaps as the policy implementers appeared not to have taken into account characteristics such as location and the social position of women it targeted, to ensure that the special preference intended through the 1.5 bonus intervention points for admission, was indeed granted to disadvantaged groups.

In the contexts described above, the study explored the concept of gender in Uganda's public university education as a category in and of itself, and as one that is mutually constituted through the interaction with Affirmative Action, the national merit system and the district population quota based system; in contexts (such as location), politics and epistemologies. It identifies the functions performed by gender based on the policies, systems and practices responsible for the distribution of public university education in Uganda. The conceptualisation of gender as a category in and of itself, and as a mutually constituted entity, brings into focus the multidimensionality of gender in the concept of equity/inequality in the distribution of public university educational opportunities. It seeks to highlight the role, meaning, function and implications of gender in the distribution of the public university educational opportunities by regions and districts, students' high school and public university career fields. In this context, the study sought to assess ways in which the current modes of governance of the distribution of public university education in Uganda – policies, systems and practices responsible for the distribution of public university education – have responded to gender.

The study set out to examine the role, function and implications of Uganda's Affirmative Action policy and programme. It assessed how the social phenomenon of gender-based inequality is manifest in 10 colleges and 158 fields of study, drawing attention to how policies and systems responsible for the distribution of education may account for subject-based inequalities in higher education. The concept of representation is used to determine if and how the configurations of women's representation by region, district, public university colleges and fields of study changed; and if so, how, especially in the context of the district population quota system, the national merit system and Affirmative Action policies and practices responsible for the distribution of public university educational opportunities in the country. The study identifies districts and fields of study where gender gap is most concentrated. Important argument is made for change in policy instruments, so that gender equality can be achieved across the entire country. It is argued that Affirmative Action should be seen to benefit the historically disadvantaged and not the privileged. The gendered picture painted by the study is not new; neither is the gender gaps identified in the key fields of study in public universities. It is the systems' analysis which has been made and a concrete proposal on how to address it, that is clearly examined and articulated. This is extremely important.

### 1.3 Research aim and objectives

The aim of the study is to assess the distribution of public university educational opportunities in regions and districts of Uganda. The study focuses on the concepts of equity, social location, social position, Affirmative Action and gender to assess and analyse the pattern of the distribution of public university educational opportunities in regions and districts of the country and the policies, systems and practices responsible for this. Table 1.1 below provides a summary of the main concepts and objectives of the study:

**Table 1.1: Summary of the main concepts and objectives of the study**

CONCEPTS	SPECIFIC OBJECTIVES
Governance	1. To review the policies, systems and practices responsible for the distribution of public university education in Uganda.
Population Quota	2. To assess how the population quota of regions and districts of Uganda influence the distribution patterns of public university educational opportunities in Uganda.
Location and Social Position	3. To examine the influence of location and social position (i.e. district of students' origin and students' high school) on the distribution of public university educational opportunities in regions, districts and public university fields of study in Uganda.
Affirmative Action	4. To explore the extent to which Affirmative Action policies have impacted on women's representation in public university education in Uganda.
Gender	5. To investigate how men and women are represented by career fields in public university education in Uganda.
	6. To provide recommendations to address the conundrums of equity in the distribution of public university education in Uganda.

## 1.4 Research questions

The research questions cover the concepts of governance, population quota, location, Affirmative Action and gender in relation to the distribution of higher education in regions and districts of Uganda as explained above.

**Table 1.2: Research questions**

CONCEPTS	THEORETICAL QUESTIONS
Governance	1. What policies, systems and practices are responsible for the distribution of public university education in Uganda?
Population Quota	2. How does the population quota of regions and districts of Uganda influence the distribution patterns of public university educational opportunities in Uganda?
Location and Social Position	3. How does the location of students' district of origin and social position of high school influence the distribution patterns of public university educational opportunities in regions, districts and public university fields of study in Uganda?
Affirmative Action	4. What would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme?
Gender	5. How are men and women represented by career fields in public university education in Uganda?
Recommendations	6. What can be done to address the conundrums of equity in the distribution of public university education in Uganda?

## 1.5 Scope of the study

Although the education sector in Uganda made important gains in gender equality and girls' education over the last two decades, there are significant equity and gender gaps at all levels. In 2014, girls represented 46 per cent of those enrolled in secondary school. Only 34 per cent and 25.9 per cent of enrolled females completed senior four and five (Grades 11 and 12) respectively compared to 45 per cent and 33.6 per cent of males (MoES, 2016). At Senior Four (Grade 11),

the performance index was 39.7 per cent for females, in contrast to 44.5 per cent for males, in contrast to 62 per cent for girls and 59 per cent for boys in Senior Six (MoES, 2016).

At pre-primary level, boys constituted 49.5 per cent and girls 50.5 per cent of total enrolment. However, the net enrolment rate for boys and girls was a mere 9.7 per cent. Significant rural-urban disparity was observed in the distribution of Early Childhood Development (ECD) centers. Thirty-three per cent of all ECD centers were found in the central region, 10 per cent in the western region and only two per cent in the northeastern region respectively (MoES, 2012). The majority (86.5 per cent) of pre-primary teachers were females. The private sector-led pre-primary sub sector was associated with very high costs, with marginal participation, particularly in rural districts and areas of Uganda.

At the level of primary education, girls represented 49.9 per cent and boys 50.1 per cent. Of those enrolled, the survival rate to primary seven for girls was at 32.9 per cent and 33.1 per cent for boys. This was the lowest in the region (MoES, 2016). The numeracy rate at primary six for girls was only 37.4 per cent and 45.8 per cent for boys in 2015. The Primary Leaving Examinations (PLE) performance index was 54 for girls and 60 for boys in 2014 (MoES, 2016). Despite the introduction of Universal Secondary Education (USE) in 2007, 69 per cent of Ugandan adolescent girls have never attended secondary school; 40 per cent of girls are married by 18 years (MoES, 2016). The highest level of drop out especially for girls is in primary five to primary seven. At secondary level, girls constitute 46 per cent of children with disabilities. The above figures demonstrate that educational access, outcomes and opportunities remain a major conundrum at all levels of the education system.

The barriers responsible for these gaps are historical, social and cultural. These include negative attitudes, inadequate teaching and learning material, and the lack of facilities and trained teachers. Beyond the physical facilities, girls are often disadvantaged by inadequate sanitation facilities and infrastructure, early pregnancies and forced marriages (MoES, 2009; 2016). Regional disparities, based on location, levels of economic development and cultural norms, beliefs and practices exist between urban and rural areas. According to the MoES, many sub-counties do not have a well-facilitated primary and secondary school, which is mandatory under the laws of Uganda. In spite of the introduction of the Science Policy in 2004, the number of

girls studying sciences is critically low (MoES, 2012). Female teachers represent 23.6 per cent at secondary level. This implies significant gaps in the availability of role models, counselors and advocates for girls.

Although the enrolment of women improved from 31 to 42 per cent between 2008 and 2015, the gender gap at tertiary level is wide (MoES, 2016). By year three, only 28.6 per cent of students enrolled at tertiary level were women compared to 71.4 per cent men. This reflects a high dropout rate among women in tertiary education. Similarly, the majority of 73 per cent of instructors were males. There was significant levels of gender differences in fields of study, with a strong male bias in agriculture (81 per cent), forestry (72 per cent), science (69 per cent), veterinary medicine (82 per cent) and education at 75 per cent (MoES, 2016). There calls for more efforts towards inclusion. Addressing these challenges requires strategic interventions and accountability measures that built on key performance indicators and targets aligned to the Sustainable Development Goals, especially goals four and five-quality education and gender equality.

### **Policies, systems and practices responsible for the distribution of public university education in Uganda**

In Chapter 4, the study reviews the policies, systems and practices responsible for the distribution of public university education in Uganda. It examines the regulatory and policy framework that has evolved over the last 45 years to regulate the distribution of education, assessing its meaning, functions and implications for equity and equality in the distribution of public university educational opportunities in regions and districts of Uganda.

### **Equity in the distribution of public university education in regions and districts of Uganda**

In Chapter 5, the proportions of public university student population allocated to each region and district of Uganda, from 2009 to 2017 are analysed in contrast with the population quota of the same regions and districts of the country. The purpose is to identify potential Equity Gaps in the distribution of public university education by location. Chapter five builds on the concept of equity to explore the phenomenon of inequality in the distribution of public university education in Uganda in ways not previously reported. The chapter (a) constructs the Fair Share Index as a

measure of equity in higher educational access and distribution; (b) computes the Fair Share Index (FSI) of public university education; (c) assesses the actual proportions of public university student populations allocated to each of the four regions and 112 districts of Uganda; and (d) analyses the Fair Share Gap or Equity Index in public university education by region and district of the country; and (e) establishes the Equity Index of districts in public university education before categorising districts of Uganda into three equity categories. The chapter examines the functions performed by district population quota as a proxy for equity. It explores if and how the distribution of public university student population varies, depending on the configuration of population quota from one region and district of the country to another in response to the modes of governance used or policies and systems responsible for its distribution in regions and districts of the country.

#### The role of location in the distribution of public university education in Uganda

In Chapter 6, the study examines the meaning, function and implications of location on the distribution policies and systems of public university education in Uganda. It introduces the concepts of Equity Distance (ED) and Equity Index, to examine if and how students' districts of origin matter in Uganda's public university educational distribution system. The study assesses potential benefits of district of origin to epistemic groups that are specific to the theoretical significance of the meaning of the Feminist Standpoint Theory. It analyses possible variations in the distribution of public university education among multiple groups of districts involved and limitations rendered in specific locations, to access to public university educational distribution system in regions and districts of Uganda.

#### **Students' high school and public university educational distribution system**

Chapter Seven builds on the feminist theory of social position to examine if and how students' high schools affect Uganda's public university educational distribution system. It seeks to analyse the potential benefits high schools may provide to epistemic groups that are specific to the Feminist Standpoint Theory of social position. The chapter examines if and what variations exist in the social phenomenon among multiple groups of schools involved in the distribution system. It assesses possible limitations rendered by the public university educational distribution

system to schools in specific locations. In line with the feminist discourse of social location and social position, the chapter assesses the roles and functions of high schools as a factor of social position in the policies and systems responsible for the distribution of public university education in regions, districts and public university fields of study in Uganda.

In Chapter 8, the study explores what would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme. In particular, it analyses if and how the Affirmative Action policy increased women's access to public university educational opportunities in districts of Uganda and in public university fields of study critical to economic growth and development. The study explores in detail what would have happened to women's representation in public university education in Uganda in the absence of the 1.5 bonus intervention points of the Affirmative Action programme for women, which aimed to bridge gender gaps in public university education. It examines potential benefits of the programme in promoting equity in the distribution of public university educational opportunities in districts across the country. It assesses the role of location and social position in the context of the meaning, functions and implications of the Affirmative Action policy in public university education for women in 112 districts, 158 public university fields of study and 1 178 secondary schools in Uganda.

### **The Gender context in Uganda's higher education system**

In Chapter 9, the study investigates how men and women in Uganda are represented in career fields in public university education. The study assesses the distribution of the public university student population of 101 504, admitted to five public universities in Uganda from 2009 to 2017, to examine the role, function and implication of Affirmative Action to the gender agenda. The concept of representation is used to assess the potential meaning, function and implications of gender in public university educational distribution and analyse the changing configurations of gender in public university educational distribution by region, district, public university colleges and fields of study. The study applies the feminist concepts of gender parity to assess the phenomenon from the perspectives of policies, systems and practices responsible for the

distribution of public university educational opportunities in all public university fields of study critical to economic growth and development. It compares the levels of representation of men and women, from different regions and districts of the country, in 158 fields of study. It identifies districts and fields of study where the representation gap is concentrated, based on Uganda's national merit and district population quota-based policy and systems of governance of public university educational distribution. The study entails a discussion of results and a comparison of its findings with other authors' findings, examining where it agrees or disagrees. Chapter 10 produces a synthesis of the findings and results of the study and examines its contribution to the field, body of knowledge and research understanding. Finally, the main conclusions and recommendations are stated at the end of the thesis.

## **1.6 Importance of the study**

In recent times, considerable emphasis has been laid on researches that explore ways of expanding access to development resources, including quality education, to address concerns about the growing levels of inequality against a backdrop of a faster growing and wealthier world. Attempts have been made to find solutions that take the discourses of equity and equality for all into account but, since the 1990s, inequality has risen. While about half the studies on the distribution of education relate to the challenge of educational inequality to income inequality, the other half are concerned with the similarities between educational inequality and wealth inequality (Galbraith, 2018). Using data from household surveys, the studies compare levels of income and wealth distribution of population groups with levels of educational attainment to assess educational distribution. Because education is an asset (Vinod *et al.*, 2001), there is a need to look beyond quantity and quality or input and output dimensions of its distribution. This study stands out for its emerging perspectives on equity in the distribution of higher educational opportunities as an asset. It provides new discourses and measures which deconstruct the conundrum of inequality in public university educational distribution from the perspectives of policies, systems and practices responsible. It presents a rigorous and systematic approach, which simplifies the complexity of investigation of the social phenomena of inequality in educational distribution. The Equity Index developed by the study settles puzzling complexities in higher educational access and distribution, thereby contributing to an alternative vision in the

study of inequality.

In Chapter 3, the study presents the Fair Share Equity Framework of analysis created, to examine the concept of equity and explore the phenomenon of inequality in public university education in ways not previously reported. The chapter applies the Fair Share Equity Framework of analysis to examine the concept of equity in the context of policies and systems responsible for the distribution of public university educational opportunities in regions and districts of Uganda. It examines the functions performed by population quotas as a proxy for equity and explores if and how the distribution of public university student population varies from one region and district to another. This is dependent on the changing configuration of district population quotas, students' district of origin, high school and gender in response to the modes of governance used or policies and systems responsible for its distribution in regions and districts of the country. In so doing, the study conceptualises population quota as a social category and a unit of analysis (in Chapter 5) based on the discourses of social locations (Chapter 6), social positions (Chapters 5 and seven) and epistemic advantage advanced in the feminist theorisation of knowledge. The application of the Fair Share Equity Framework of analysis in Chapter 5 represents an important contribution to the expansion of the theoretical and empirical debates on the meaning, functions and implications of the discourses of social location, social position and epistemic advantage advanced in research on inequality from feminist theories of knowledge. By so doing, the study contributes to expanding the scope of debate and the theoretical relevance of the Standpoint epistemology and approach to knowledge.

The Fair Share Equity Framework in Chapter 5 focuses on the contrasts and similarities between the actual proportions of public university student population allocated to each region and district of Uganda versus the population quota of the same regions and districts of the country. Chapters Six, Seven, Eight and Nine assess the meaning and function of students' districts of origin, students' high schools, Affirmative Action and gender in the distribution policies, and systems and practices of public university educational opportunities in Uganda. These chapters build further on the feminist discourse of location and social position – the idea that “*one's social location affords him or her multifaceted access to social phenomenon*” (Mamo, 2005: 358). The three equity categories of the Fair Share Equity Framework elaborated in Chapter 5 contribute to

the advancement of the inter-categorical approach of the feminist epistemology. It advances the discourse on how inequality is formed and naturalised, in the context of multiple processes, codes and regulations, within the hierarchical structures of societies, in which potential for social advancement of certain category of women and men may be encouraged or discouraged (McCall, 2005). The inter-categorical approach hypothesises inter-group differences and inequalities. The three equity categories analyse potential inter-group differences and inequalities to contribute to the development of provisional categories of analysis based on the Standpoint Theory of social position and social location (McCall, 2005: 1784-85), given its focus on structural inequalities (McCall, 2005: 1784-85). The five provisional categories; district population quota, district of students' origin, high school, gender, and Affirmative Action, advance the discourse of the inter-categorical approach of the feminist knowledge base (McCall, 2005: 1786-87), specifically, the idea of comparing multiple groups that constitute each epistemic category (McCall, 2005: 1786-87; Donzelli, 2018; Harding, 2004; Intemann, 2010). Through its empirical findings, the study conceives new social indicators and measures of inequality in public university education. It provides new tools and techniques to comprehend the social phenomenon through the advancement of the discourses of social location and social position (Harding, 2004; Intemann, 2010) in the study of the distribution of public university education.

The Fair Share Equity Framework of analysis presents a comprehensive set of tools based on the concept of equity as underpinned by the feminist Standpoint empiricist discourses of social location and social position (Harding, 2004; Intemann, 2010) in the context of the distribution of public university educational opportunities in 4 regions and 112 districts of Uganda. This represents an important contribution to the expansion of the theoretical and empirical debates on the meaning, functions and implications of the discourses of social locations and social positions identified in feminist literature as social categories in research on inequality. By so doing, the study contributes in expanding the scope of debate and the theoretical relevance of the Standpoint epistemology and approach to knowledge. The Fair Share Equity Framework of analysis offers an “alternative vision of scientific truth and method” in comparison to the input and output epistemologies of the distribution of education, thus providing legitimacy to knowledge created (Donzelli, 2018). It expands the meaning and functions of the discourses of social location and social position as key factors that shape access to and distribution of public

university educational opportunities in ways, which provide new insights about the complexity of the phenomenon in the context of policies, systems and practices responsible for the governance of its distribution.

## **1.7 Conceptualisation**

The Standpoint Theory of feminist conceptualisation of knowledge

The study builds on the concepts of social location or Standpoint to explore the concept of equity and the social phenomenon of inequality from a governance dimension based on feminist epistemology of the Standpoint Theory. The Standpoint Theory hypothesises potential existence in the variations and configuration of the phenomenon based on the notion of location, and social position of the epistemic groups. In his conceptualisation of the Standpoint Theory, Intemann states “[s]ocial location systematically shapes and limits knowledge production and access to resources from a particular Standpoint” (Intemann, 2010: 783). In the above dispensation of the Standpoint Theory, access to social phenomena “varies according to particular Standpoints” (Intemann, 2010: 783). Based on this theory, the study conceptualized five units of analysis. This units offered a framework of analysis which assesses the social phenomenon of inequality from multiple, conflicting and changing dimensions of the phenomenon based on five concepts of district location, population quota, high school, gender and Affirmative Action in four regions and 112 districts of Uganda. The meaning, relevance, functions and implications of the concepts of social location, social position and epistemic advantage for each research question, is theorised to vary depending on contexts, politics or policy and epistemologies. While the discourse of social position is dependent on social location, epistemic advantage depends on one’s social position, in view of the limitations imposed by social location on one’s social position and the implications of the social position on the epistemic advantages enjoyed within a specific context (Intemann, 2010; Stone-Mediatore, 2007; Donzelli, 2018).

In the Standpoint epistemology, social location, social position and epistemic advantage are understood and treated as mutually constituted. While the student’s home district reflects his or her social location, high school equates to the student’s social position. The epistemic advantage refers to the potential advantage enjoyed by the student’s high school in the public university

educational distribution systems in regions, districts and public university fields of study in Uganda. Epistemic advantage refers to the social meaning and functions performed by one's social position and its implications on access to a public university educational opportunity, if any, in the context of policies, systems and practices responsible for the distribution of public university educational opportunities in different regions and districts, schools and public university career fields of study. This brings into focus the multidimensionality of the concepts of social location and social position on the conundrum of equity/inequality in the distribution of public university educational opportunities.

In objectives two, three and four, the study is conceptualised to assess if and how the functions and contents of the discourses of the feminist Standpoint concepts of social location and social position shift according to population quota of regions and districts; as well as by students district of origin, high school and public university field of study; in response to the current modes of governance-policies, systems and practices responsible for the distribution of public university education. The three chapters are firmly grounded on the Standpoint Theory that acknowledges the notion that social location and social position may function in ways that naturalize, produce, reproduce and legitimize inequality. This locates the discourses of social location, social position and epistemic advantage at the heart of objectives two, three and four to address research questions two, three and four of this study.

Marx and Lucaks' ideas of the proletariat's Standpoint became the Feminist Standpoint Theory of knowledge. The base of the theory is the logic that knowledge is grounded in historical socio-economic context; and that one's social location affords him or her multifaceted access to social phenomenon (Mamo, 2005: 358). In other words, the Standpoint Theory recognises that the historical, social and cultural context of one's location determines their social position and access to resources. This influences knowledge production and access to vital resources, such as public university educational opportunities in countries such as Uganda. In the context of this study, the theory of social location, social position and epistemic advantage is not simply a perspective; it is a reflection of an awareness and understanding of how district location, population quota, high school, gender and Affirmative Action may place some epistemic agents in positions of privilege or disadvantage in the public university educational distribution system. If this is the case, it may

produce, reproduce, naturalise and legitimise inequality. This is what the study is conceptualised to explore.

### **Gender in the context of feminist theories of knowledge**

Objectives 4 and 5 focus on gender and Affirmative Action. These are grounded in the feminist epistemology of knowledge. While objective, four seeks to explore what would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme, objective five analyses how men and women are represented by career fields in public university education in Uganda. In both objectives, gender is treated as a social phenomenon and as an analytical category (Hall, 1997a; 2000). Its meaning, functions, relevance and implications in the context of the distribution of public university educational opportunities in Uganda may be understood as contentious and fluid (Nicholson, 1994; Haslanger, 2012; 2015; 2017) from one region and district of the country to another. It may vary depending on contexts (such as location and social position), politics (including policies, systems and practices responsible for its distribution) and epistemologies (Intemann, 2010; Stone-Mediatore, 2007; Donzelli, 2018) in the different regions and districts of Uganda, and in fields of study critical for equity and equality in public university education in Uganda. The significance of gender, as a theoretical framework for objectives five and six, addresses two research questions: (a) what would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme? (b) How are men and women in public universities in Uganda represented by career fields critical to economic growth and development?

Based on the above theoretical questions, the meaning, functions and relevance of gender is assessed and investigated within a socially, culturally and historically specific context. This reference to the social, cultural and historical construct of gender in a specific context implies a conceptualisation, which may produce sex differences in the theoretical analysis of gendered subjects and findings of this study. It is the social, cultural and historical construct of gender in a specific context that may naturalise men's dominion over women in access and distribution of power and resources (Haslanger, 2012; Mathieu, 1989; Delphy, 1993). In the context of social, cultural and historical conceptualization of the phenomenon, gendered subjects in public

university education in Uganda are those whose position in the admission system may be marked and justified by “features”, presumed to be evidence of the subject’s subordination (Haslanger & Haslanger, 2012: 234). It refers to policies, systems and practices, which may produce sex differences in the analysis of the distribution public university educational opportunities (Haslanger & Haslanger, 2012; Mathieu, 1989; Delphy, 1993). As a culturally, historically and socially specific concept, the study seeks to explore if and how gender in the context of public university policies, systems and practices of governance in Uganda is rooted in historical processes, which may put men and women in different social positions. These social positions may determine empowerment of some and disempowerment of others (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66) in all aspects of public life, such as education, health, economy, politics, jobs, employment, and income or in the sharing of the benefits of land, agriculture and natural resources.

As a social phenomenon, gender is understood and treated as a heterogeneous category or unit of analysis (Mikkola, 2016). Each of the gendered categories is conceptualized to intersect and interact within its own hierarchies, categories and intra-categories in the context of social location, social position and established structures. The analogy of social, cultural and historical specificity of gender provides this study with a framework that seeks to avoid analysis that only brings into focus the issues of marginalised or the poorest of the poor (Mohanty & Alexander cited in Stone-Mediatore 2007: 66). It eliminates the temptation to focus only on the issues of the relatively well off among designated groups. In the dialogue in objective five, which focuses on the discourse of gender in the governance of the distribution of education, the significance of questioning gender as a social category in respect of policies and systems responsible for the distribution of public university in Uganda cannot be ignored.

## **1.8 Literature review**

Studies show that social policies such as Affirmative Action can serve effectively to correct the effects of specific forms of discrimination (Alon, 2011; Estevan, Gall & Morin, 2018). The origins of the Affirmative Action is rooted in the American Civil Rights movement, which ended slavery in 1865 (Aderson, 2014), gave African-Americans citizenship in 1868 and the voting right in 1870 (Basant & Gitanjali, 2019). Scholars such as Ronald Dworkin contend that

admission to a public university must be used to advance objectives (Dworkin, 1981) such as diversity. Affirmative Action can therefore be acceptable in public institutions to ensure that high performers, not just those with the highest scores, are well represented at these institutions. Some believe that Affirmative Action is counterproductive, that it reduces the importance of success and hard work as it rewards people based on the group to which they belong rather than their ability. For that reason, Affirmative Action is labeled as reverse discrimination. For example, the theory of mismatching has been advanced to suggest that, through Affirmative Action policies and programmes, students find themselves in fields of study for which they are not qualified. This, according to the mismatch theory, increases dropout rates. In his study, published in the *Standard Law Review*, Professor Richard Sander stated that black students in law school in the United States of America drop out of law school and fail bar exams due to the mismatching effect (Sander, 2004). Sander's paper on mismatching was unanimously disapproved by a number of law professors, who theorised that eliminating Affirmative Action policies would cut down the number of black lawyers in the United States of America by 12.7 per cent (Chambers et al, 2005).

## **1.9 Limitations of the study**

The three main limitations of the study are related to the limitations of the feminist epistemology of the Standpoint and gender theories used in Chapters 5, Six and Seven. Specifically, this is related to three main areas: (a) the limitation of the notion of epistemic privilege found in the discourse of social position; (b) the tendency of gender researchers to homogenise national groups, normalise and reproduce homogenic notions of particular groups, while ignoring possible pragmatic challenges, contestations and contradictions (Kim-Puri, 2005; Kim, 2007) in policy making; and (c) the complexity in the investigations and analyses of the social phenomenon of inequality, which lies in the comparison of multiple-groups that constitute each of the six categories of analysis involved in this study (McCall, 2005: 1786-87; Donzelli, 2018).

The main limitation of the Standpoint Theory is related to the limitation of the concept of epistemic privilege found in the discourse of social position – the idea that policies, systems and practices can correct the social phenomenon of inequality almost instantaneously. According to Lentin (2014: 82), even when contemporary governing systems and policies are not blinded by

privilege positions, structural privileges enjoyed by groups do not dissipate in the context of progressive activism, in fact, they often exacerbate. The conceptualisation of the Fair Share Equity Framework, in the context of the inter-categorical approach, addresses this limitation to advance the feminist theorisation of social location, social positions and epistemic advantage in the field of the distribution of education. The idea was to (a) contextualise if and what epistemic advantages exist in the public university education distribution system in Uganda, based on the theories of social location and social position; (b) identify if and how exclusionary tendencies exist in distribution policies, systems and practices; (c) assess if and how the governance system contradicts, justifies and legitimises the phenomenon; and (d) provide any apparent evidence of exclusion to demonstrate if and how current policies, systems and practices play a role in rationalising the phenomenon and how this may affect multiple social groups (Intemann, 2010; Stone-Mediatore, 2007; Donzelli, 2018).

The second area of limitation to the study was the complexity of investigation and analysis involved. The source of the complexity regarding the investigations and analyses was located in the comparison of multiple groups that constitute each of the six categories of analysis above (McCall, 2005: 1786-87; Donzelli, 2018). There were 10 public university colleges, 112 districts, 158 fields of study and 1 178 secondary schools that accounted for 1 015 04 students admitted to five public universities in Uganda from 2009 to 2017. Although this complexity was a challenge, it was also a worthy resource for the study. Once the extent of the complexity of the study was clearly revealed, the researcher adjusted his approaches and techniques, adopting the inter-categorical and intra-categorical approaches of feminist epistemology as the main tools of analysis and investigation. This focused the study on the techniques, which allow for multiple groups' analyses and intergroup comparisons of the phenomenon (Yuval-Davis, 2011: 4). The inter-categorical approach of feminist epistemology, which hypothesises the potential existence of inter-group differences and inequalities (McCall, 2005), draws attention to "variations among already constituted groups" and the "changing configurations" of the phenomenon "along multiple and conflicting dimensions" (McCall, 2005: 1784-85).

Six provisional categories of analysis were identified to advance the inter-categorical approach through multiple-group comparison. These included (a) district of students' origin; (b) district

population quota; (c) students' high school; (d) public university field of study; (e) gender; and (f) beneficiaries versus non-beneficiaries of the Affirmative Action programme. The challenge was to present data and analyses on each of these "provisional categories" in a manner that demonstrates variations and the changing configurations of the phenomenon among hundreds of already constituted groups and along multiple and conflicting social dimensions. The use of provisional analytical categories allows the study to focus on provisional categories and draw attention to structural relations and intergroup differences to avoid the phenomenon of homogenisation (McCall 2005: 1784-85). The provisional categories were determined based on policies, systems and practices that exist and are used in the distribution of higher educational opportunities in regions and districts of Uganda.

The inter- and intra-categorical approach allowed the researcher to focus on both those in privileged and those in subordinate positions (Donzelli, 2018). This approach enabled the study to carefully examine inter- group differences and expose the complexity and nuances of the phenomenon (Yuval-Davis, 1997: 7). The inter-categorical approach strengthened the theoretical base of the study by not focusing analysis simply on the need to "identify similarities or differences related to the phenomena" but to "call attention to the complexities and contradiction involved" (Kim-Puri, 2005: 149).

On the subject of policy analysis, a key limitation was located in how to assess the efficacy of the Affirmative Action programme as a social policy. Initially, there was the tendency to focus the study more on causal effect of the Affirmative Action to address the question of what would have happened to women's representation in Uganda's public university education in the absence of the Affirmative Action programme and less on the importance of investigating when the policy does and does not work. To address this limitation, the researcher learnt from Arellano (2003) who observed that, when assessing the efficacy of social programmes/policy, the focus on causal effect alone is often of limited value. It is also important to investigate when the policy does and does not work (Arellano, 2003). To address the tendency to focus on causal effect alone, the inter-categorical approach of feminist theorisation and counterfactual design methods were adopted. To address the question of what would have happened to women's representation in Uganda's public university education, participants were challenged to argue out the question

of what would have happened to women in public university education in Uganda without the Affirmative Action programme. The idea was to assess the extent to which policy implementers were able to gain control of events that happened in the implementation of the policy (Nasco & Marsh, 1999; McCloy & Byrne, 2000) to avoid potential for contradictory results (Lee, 2014; Lebow, 2000). In the process, a number of socio-economic variables that affected the outcome of the bonus intervention programme of the Affirmative Action policy were identified and assessed through interviews. These were the factors, which were thought to confound the cause and effect hierarchy of Affirmative Action and, if not taken into account, would confuse the desired aim of this assessment. This would determine what would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme. It would also analyse if and how the Affirmative Action policy increased access for women to public university education in Uganda.

The inter- and intra-categorical approach of feminist theorisation allowed the study to take into account the heterogeneous nature of the policy environment and its potential impact to determine the different contexts in which the Affirmative Action policy worked or did not work. Accounting for these differences addressed limitations on the degree to which results can be generalisable as well as the applicability of lessons learned for interventions in other contexts (Arellano, 2003). The inter- and intra-categorical approach of feminist theorisation allowed the study to: (a) undertake a multi-group analysis of districts that did benefit and those that did not benefit from the Affirmative Action policy; (b) ascertain the subpopulations for which the policy was effective or harmful; (c) propose recommendations to optimise the impact of the 1.5 bonus intervention policy; and (d) generalise causal effect estimates obtained from a sampled target population of female students from 112 districts in Uganda.

## **1.10 Conclusion and summary of the research areas**

In chapter one above, the study examines the meaning, function and implications of equitably distribution of higher education for welfare consideration and development. It highlights the benefits of educational distribution to welfare consideration and the significance of equity in the distribution of higher education as a resource on one hand and a significant barrier for Africa's development on another. It sheds light on the central role of equity in the distribution of higher

educational opportunities as a key function of the policies, systems and practices responsible for its distribution in regions and districts of the country. The chapter presents the aim and objectives, scope of the study and significance of the research, with a focus on the concepts of equity, location, social position, Affirmative Action and gender in understanding the distribution of public university educational opportunities in regions and districts of the country and the policies, systems and practices responsible.

Chapters one and two elaborate on the theoretical groundings of the study. Chapter Three presents the methodology and the theoretical foundations of each of research question. It grounds the foundation of the study objectives on the discourses of (a) social location; (b) social position; and (c) epistemic advantage. It spells out the research techniques used to draw out the study population and sampling plans and translate the theoretical elements of the study into specific methods and tools of data collection, analysis and interpretation.

Chapter Four is a review of the regulatory and policy framework, which governs the distribution of education in Uganda. The chapter assesses the policy contexts and their implications for equity and equality in the distribution of public university educational opportunities in Uganda. In Chapter 5, the study presents its empirical results and findings based on the Fair Share Equity Framework of analysis. It does so, in ways not previously been reported. The chapter focuses on the contrasts between the actual proportions of public university student population allocated to each region and district of Uganda versus the population quota of the same regions and districts of the country as a measure of inequality. Using the Fair Share Equity Framework of analysis to address research questions 2, 3 and 4 in the context of the Standpoint and gender theories, the study conceptualises population quota as a social unit and a unit of analysis. In Chapters 6 and Seven, the discourses of social locations (Chapter 6), social positions and epistemic advantage advanced in the feminist theorisation of knowledge are examined. The chapters assess the meaning and function of students' districts of origin and students' high schools to the social phenomenon of inequality in higher education. The chapters explain how the discourses of social location and social position (Harding, 2004; Intemann, 2010) influence the distribution of public university educational opportunities in regions and districts of Uganda.

In Chapters 5, six and Seven, Eight and Nine, the study assesses if and how social location and

social position influence the policies, systems and practices responsible for the distribution of public university education. Chapter 8, in particular, addresses the question of what would have happened to women's representation in Uganda's public university education without Affirmative Action programme. The chapter addresses the efficacy of Affirmative Action as social programme/policy, to investigate the circumstances in which the policy does and does not work. Chapter 10 summarises the study, its findings, discussions, main conclusions and key recommendations.

The next chapter (chapter two), provides the literature and theoretical groundings of the study; building on the concepts and role of location, social position and gender in worldwide educational inequality. The consequences of inequality in education are highlighted both for individuals and for society as a whole. The chapter contends that inequality in education exacerbates poverty and other forms of deprivation.

# CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

In early studies, the distribution of education was largely a measure of educational attainment. One of the first indicators used was School Life Expectancy (SLE) (Huebler, 2013). SLE refers to the average number of years of schooling that children spend in the educational system of their country (Psacharopoulos & Arriagada, 1986). To assess the distribution of education, SLE data was used to assess the distribution of education by comparing one country with another (UNESCO, 2012). For most of the 1990s, there was an effort to broaden the use of educational input or quantity data in the assessment of educational distribution (Barro & Lee, 1993; 1997; 2000; 2010). New indicators, such as enrolment ratios, completion rates and pupil: teacher ratios were developed and applied on a larger scale with a larger number of countries involved. This became popularly known as the input approach or dimension to educational distribution (Ewout, 2008).

Over time, the use of quantity or input, to assess educational distribution was considered inadequate; quality also needed to be taken into account (Lockheed & Verspoor, 1991). This led to the emergence of the output approach in which scores of cognitive performance tests conducted on the same subjects using a cohort of students of the same age group are used to measure achievements of schooling (Bailey, 2008; Jere, 1987; Jere & Birdsall, 1983; Deaton, 1997; Fan, 2000). Here, the main source of controversy among researchers was the achievement data used as achievement data was only available for industrialised countries – in fact, only 12 countries were initially involved. Second, test results used were not comparable over time (Vinod et al., 2001). As a result, the idea of Education Gini coefficient, in which a combination of financing and attainment data of 16 East African countries was used to calculate the first Gini Coefficient of education for 12 countries in 1998. This was upgraded to 20 countries in May that year (Lopez, Vinod & Wang, 1998) before it was applied on a larger scale in 85 countries (Vinod et al., 2001). The education Gini approach was built on education attainment data that a number of researchers created over the period 1960-1990 (Psacharopoulos & Arriagada, 1986; Barro &

Lee, 1993; 1997; 2000; 2010).

Because higher education is an asset, its welfare and development benefits to a given sub population does not depend on the average level of one's education alone, but also on its equitable access and distribution across the entire country's population, irrespective of levels of wealth or income. This requires looking beyond how quantity and quality of schooling or educational input and output is distributed. It calls for the need to take into account factors such as social location, social position and epistemic advantage when assessing the concept of equity in the distribution of higher educational opportunities across regions and districts of the country. It requires dealing with the governance perspectives-the policies, systems and practices responsible for its distribution across regions and districts of the country and how these may function in ways that naturalize, produce, reproduce and legitimize inequality.

## **2.2 The distribution of education**

This study builds on feminist theories to bring an equity dimension of the distribution of education into perspective. The study stands out for its emerging perspectives on the Fair Share Equity Framework that defines equity and what constitutes the social, but not the economic aspects, of the distribution of education. It does so in ways not previously reported by exploring new discourses and providing a theoretical framework that deconstructs the public university educational distribution as a governance issue. This is a minoritarian orientation and yet a rigorous and systematic approach to explore the convergence between policies, systems and practices responsible for the social phenomenon of inequality.

The Fair Share Equity Framework makes “comparative multi-group analysis” (McCall, 2005: 1784-85) and equity categorisation possible. It provides analysts and policy makers with a tool to identify where Equity Gaps are most concentrated. This enables policy makers to think strategically about social policies and programmes to ensure that the benefit of development reaches every part of the country, and not just those at the top. Although it may be “imperfect”, the framework simplifies the complexity in investigation and comparison of multiple groups that constitute each category (McCall, 2005: 1786-87; Donzelli, 2018). It puts emphasis on understanding inequalities between and within groups (Yuval-Davis, 2011: 4) and how they are

formed, allowing a focus on both those in privileged and those in subordinate positions (Donzelli, 2018), and contributing to the understanding of the social phenomenon from a governance dimension.

### **2.3 The role of governance in the distribution of education**

The distribution of public university educational opportunities in Uganda has always been a function of the state. This is subject to policies, systems and practices constructed from time to time to reflect the country's potentials and limitations. In any field, governance, as a concept, is synonymous with development (Asian Development Bank, 1995: 3). It refers to ways in which those in positions of responsibility exercise power and make decisions that impact on the distribution and management of resources including the delivery of education and other public services. It involves both the public and private sectors, formal and informal institutions. The quality of governance dictates how quality education is distributed and who gets access. It is about how resources are distributed and managed to deliver equal access to education, while recognising the fundamental role of human rights and the rule of law in managing the country's developmental process. According to Dwivedi (2001), this must encompass how policies, systems, decision-making and service delivery in education are managed. Dwivedi (2001) emphasises the concept of common good – the need to strive for equity and equality of all. This can be achieved by ensuring that governance actions lead to the development of the potential of all in the community at large. In summary, the governance of the distribution of educational opportunities must include: (i) clarity on processes or criteria by which equity and equality in access to quality education is monitored; (ii) the policies, systems and practices that distribute opportunities in a manner that takes all parts of the country into account; and (iii) the effectiveness of institutions in achieving equity and equality in access to quality education among different groups (Dwivedi, 2001: 37, citing World Bank, 2006).

In this context, effective governance in the distribution of education must take place at both macro and micro levels (Dwivedi, 2001: 37). The macro level governance concerns broader national policies, such as Affirmative Action and educational reforms, while micro level governance of education is concerned with issues within the sectors of the nation that influence the distribution of education. It is about the role of the regional, provincial and district level

structures within the education and other departments, the role of private and state owned schools and institutions of learning, civil society and the informal sector.

In all these areas, there is an emphasis on the role of policies, systems and institutions through which citizens are involved in decisions that impact on equity and equality in education. This assumes that the governance processes and structures, as well as policies and systems in place, accommodate the varying interests and provide space for all groups to participate in equal measure. Hence, good governance of education is seen to be exercised through pre-determined policies, systems, mechanisms, processes and institutions that work to achieve consensus and collective decisions that ensure equity and equality in education is achieved for all. This must be a central goal in the country's development strategy because equity in higher education is pivotal in building democratic norms, the human capital base and the citizen agency that underpins democracy, stability, peace and security (Vinod et al., 2001; Kotecha 2008a; 2008b; 2008c; 2012; Kotecha, Walwyn & Pinto, 2011).

To achieve equity and equality in the distribution of education, functioning and capable public education sector institutions, built on a legal framework that governs the conduct of institutions (public and private) in the distribution of quality education, must exist. This includes systems that regulate accountability for and the operations of private and public organisations involved. It is this institutional capacity to regulate and enforce that determines the efficacy of educational policies, which the state puts in place to deliver equal quality education for all (Asian Development Bank, 1995: 8-11). The institutional capacity to regulate, monitor and enforce determines the effectiveness of policies chosen and implemented. This means that the right choice of education policies is a necessary condition but is not sufficient to deliver equal quality education on its own. Improving how policies are implemented, monitored and evaluated is vital, particularly if standards of governance and accountability are poor.

Apart from choosing the right policies, it is the role of the Ministry of Education to ensure that policies have their desired effect on equity and equality. For this to happen, responsible policy implementers must develop and enforce norms of behaviour that regulate to respect the principle of equity and account for its delivery. This is what guarantees stability in the broad policy direction, flexibility in responding to social and market signals and discipline in applying

measures necessary for meeting long-term objectives of equity and equality despite short-term difficulties (Asian Development Bank, 1995). This requires policy makers and implementers to focus on areas and actions that ensure that education is provided as a public good, market failures are prevented and the goals of equity and equality in its distribution are promoted, as these are the hallmarks of good governance.

The effectiveness of policies through which higher educational opportunities are allocated in the different regions and districts of the country is what good governance of the distribution of education is about. A key part of this governance process is the principles of transparency, accountability, participation and predictability of the policies, systems and practices involved. Accountability requires that policy implementers and decision makers are held accountable for decisions that affect on the goal of equity and equality. This requires measures for checks and balance including an equity audit system. Accountability is about the enforcement of appropriate accountability systems to force those who govern, or allocate places, to be accountable to the public for their performance and responsibility. It is about regulating the behaviour of public officials so that power is exercised without abuse and corruption, as well as with due regard for human rights and the rule of law. Thus, this requires an active citizenry to demand for equity and equality in the distribution of education and ensure set standards or policies are met.

Transparency requires that decisions be made and enforced based on clearly established rules and regulations. Transparency also implies that information is accessible to people who have a stake in decisions made and in the enforcement of such decisions. Transparency means that information provided is given in a manner easily understood by those who need it. It is about clarity of government policies that impact on equity and equality. Therefore, a lack of transparency promotes corruption among public officials (Asian Development Bank, 1995: 11). Because equity and equality requires the input of all those involved, government institutions, need to be flexible enough to adjust, adapt and adopt the design and implementation of public policies and programmes to the changing context. This increases ownership and enhances results. Effective implementation of policies requires broad support, including that of the private sector and NGOs, all of which offer alternative solutions in education and other sectors. Broad participation ensures that the concerns of the most vulnerable are taken into account in resource

distribution.

Predictability refers to the existence of the framework that describes how accountability is enforced to ensure that those responsible for policy implementation account for their performance to the objectives of equity and equality (Asian Development Bank, 1995: 10). Predictability includes the existence of a functional mechanism that defines rights and responsibilities and includes a system that deals with complaints and settles disputes in an impartial manner to ensure the state and its agencies are “as much bound by and answerable to the legal system as private individuals and enterprises” (Asian Development Bank, 1995: 10).

Legal frameworks also ensure that risk is assessed rationally, transaction costs are lower and governmental as well as private sector arbitrariness is minimised. Predictability makes the policy environment conducive. It ensures corruption is dealt with, minority rights are taken into account and the marginalised are protected. It also ensures that the state is responsive to citizens and groups for which institutions of authority are responsible, must meet their obligations and mediate their differences. Consensus and responsiveness means that the views of the different interest groups must count in decision-making. It requires that the different interests in society be part of the broad policy for sustainable development based on an appreciation of the social, historical and cultural contexts involved. As is commonly observed, the problem in Africa is not the lack of policies and institutions –it is that institutions do not work (Chhanda & Gupta, 2015). They are often riddled with corruption and incompetence. Most often, they serve the interests of regimes, not the people. In summary, good governance in education means a functioning and capable public education system, backed by the values of fairness of access to education (Meyer, St. John & Chankseliani, 2013), transparency and accountability for equity and equality in education as a public service.

## **2.4 Higher education in Africa**

Michael Trow’s framework is perhaps the most prominent in the study of the distribution of higher education. His contribution significantly expanded the discourse of the governance of the distribution of higher education. According to Trow’s framework, higher education access goes through three main stages – the elite, the mass and the universal (Trow, 1973). Under the elite

stage, up to 15 per cent of the age cohort is enrolled, the mass stage is when at least 40 per cent is enrolled and, in the universal stage, a majority of at least 50 per cent of a given age cohort participates (Trow 1973; 2000; 2005).

In sub-Saharan Africa, access to higher education falls well below 15 per cent, falling into the elite stage. In the 1970s, only about five per cent enrolled in higher education programmes in the most advanced countries of the world (Trow, 1973). In 1940, school completion rates in the United States (US) were 51%. This increased to 70% by 1960. In the same period, the college enrolment rate increased from 45% to 62% (Snyder & Hoffman, 2003, in Herbst, 2007). By 2000, access to higher education in industrialised countries as a whole, surpassed 40 per cent (OECD, 2002). This was made possible through the expansion of the debate of the American model into continental Europe and Japan for much of the 1970s (Curaj, Scott, Vlasceanu & Wilson, 2012). This led to a discursive interface between American and European scholars, giving rise to a governance model of public university education in Europe that emphasised a nationalistic and an integrated cross border approach. By 2000, Europe had succeeded in transitioning its higher education system from elite to mass and universal stages (Trow 1973; 2000; 2005). The European example demonstrates the insectionality between the role and functions of higher education in the realm of both geopolitics and the global political economy.

In its historical context, the development of higher educational institutions in Africa was always driven by political motives. Initially, it was viewed as a tool for patronage; to enforce the dominant political ideologies. This is why public universities were established in regions according to party political affiliations (Bunting, 2002: 37). This hampered the goal of knowledge production. According to Ball (1990), public universities were seen as sites of struggle for partisan politics. They were established in regions and locations according to political affiliations to ensure socio-political dominance (Langa, 2016; Ball, 1990; Varghese, 2004; Edigheji, 2009). State control over public universities led to policies and systems that discouraged and blocked the rise of private universities in favour of public universities (Varghese, 2004). This explains why efforts to put appropriate regulations in place to create and govern the development of private institutions in Africa only started in the early to mid 1990s (Varghese, 2004: 12; Sall, 2004). Before the mid 1990s, access to higher educational

opportunities was mainly assigned by the state, based on policies, systems and practices that emphasised individual achievement.

In their study, the World Bank and the International Monetary Fund (IMF) concluded that higher education in Africa was not a public good (Brock-Utne, 2000). More recently, higher education is increasingly being recognised as a mechanism for social and economic transformation – a critical lever for Africa in the global economy; a source of knowledge and innovation, so essential in a globalised economy (Kotecha et al., 2012; Sehoole & Knight, 2013). This has led to greater attention being given to issues of access and participation (Katjavivi, 2005; Edigheji, 2009). Recent shifts in planning and governance have been observed, with the emphasis beginning to move away from elite to mass access and state control to state supervision in order to align higher education policies and systems to long term development strategies (Kogan & Hanney, 2000; Gibbons et al., 1994). Although enrolments grew in the past decade, inequality in its distribution has increased, particularly among the excluded, the hard to reach, women, the poor and marginalised in all sub-Saharan African countries (Kotecha et al., 2012). The highest enrolment ratio of 17 per cent was Mauritius, 15 per cent in Nigeria and 10 per cent in South Africa (MacGregor, 2008). Developing greater capacity for higher education and training in this region must be a key priority.

## **2.5 Affirmative Action**

Providing quality education for all is the main goal of Uganda's education system. In 1991, the Affirmative Action programme was introduced in higher education. This entitled qualified women to a bonus of 1.5 points for public university admission. Similar concerns regarding the exclusion of people with disabilities and students from remote districts and underprivileged schools led government to introduce a limited district quota system of admission in 2004. In general, Uganda's higher educational distribution system aims to reward talents. It also seeks to achieve equity in its distribution for men and women. The main drive of the Affirmative Action policy is to eliminate discrimination associated with past and present policies, systems and practices (Anderson, 2004; Andersen & Hill, 1992; Anderson, Rawls, John & Thurnau, 2008). This is in line with Uganda's international obligation under the 1989 United Nations (UN) Convention on the Elimination of All Forms of Discrimination. Since 1973, Uganda has adopted

several legislative and policy instruments to uphold Article 2.2, of the convention and domesticate its application in its national legislations, policies, systems and practices. In 1991, the 1.5 bonus point intervention policy for public university education was adopted, to enhance women's access to education. In 1995, the right to Affirmative Action was enshrined in the Constitution of Uganda under article 32.

Prior to the Affirmative Action in 1991, less than 15 per cent of student admission to Makerere, the only public University in Uganda was female (MoES, 2012). The Affirmative Action entitled qualified Ugandan women to 1.5 bonus intervention points for public university admission. This was largely seen as a mechanism for reparative justice – the notion that women in higher education needed to be compensated for structural and historical biases that hindered their participation in higher education. Subsequently, Makerere University's Senate instituted the 1.5-point programme in 1990 to boost female numbers in undergraduate programmes.

### **2.5.1 History of Affirmative Action**

Affirmative Action originated from the United States of America. Its roots can be traced back to the American civil war and the civil rights movement (Nash, 1971; Torres, 2014). Initially, the civil rights movement represented the four million African Americans who were enslaved in the South. At that time, only white men could vote (Anderson, 2004). The period of 1865 to 1877 was a turbulent era. Many white people resisted the wave of social change that swept across the country. White supremacist organisations and groups, such as the Ku Klux Klan, emerged to defend and maintain the discourse of white supremacy in America. African Americans and other ethnic minorities fought to eradicate racial discrimination. They resorted to non-violent litigation, education, and lobbying efforts. In a major legal victory in 1954, the Court ruled against the notion of separate school systems for black and white people (Hinrichs, 2012). This led the United States to begin to integrate black children gradually in white schools (Kotlowski, 1998).

The Civil Rights Movement was a culmination of resistance movements orchestrated between 1955 and 1968. It resulted into significant crises. This was followed by a period of major legislation. Key among these was the Civil Rights Act of 1964, the Voting Rights Act of 1965,

the Immigration and Nationality Services Act of 1965, and the fair housing Act of 1968. The new civil rights dispensation gave voting rights to minorities, removed racial barriers to immigration by allowing immigrants from other regions of the world, other than Europe into the USA, and abolished discrimination in the sale or renting of housing. It was not until 1961 when the term “Affirmative Action” was used for the first time by President John F. Kennedy (Butto, Moore & Rienzo, 2006). This followed a hotly contested 1960 presidential election in which Kennedy attacked President Eisenhower for doing little to end discrimination in the housing sector. In his campaign, Kennedy advocated for permanent Fair Employment Practices to implement the national policy of non-discrimination (Nash, 1971). Soon after his election to the presidency, Kennedy issued Executive Order 10925, to ensure that all employees were treated equally with no regard to race, origin etc. Since then, Affirmative Action has taken a central place both in the US and around the world. Affirmative Action has been used around the world to address all forms of historical injustices. Some countries consider race and gender in granting special preferences to disadvantaged groups. In India, political positions are reserved for members of disadvantaged groups. In Iran, Parliamentary seats are reserved for non-Muslim religious groups. Lebanon distributes high offices based on religious affiliations and the offices of President, Prime Minister and Speaker of national Parliament must be occupied by a Maronite, a Sunni and Shia Muslim respectively. This is also the case in the Palestinian Authority where the mayor of Bethlehem must be a Christian, in a city with a Muslim majority. Like many other countries, the constitution of Pakistan provides for Parliamentary seats for non-Muslims and women. In Taiwan, 34 Parliamentary seats are based on proportional representation, with half reserved for women.

In the European Union, by 2020, women must constitute at least 40 per cent of non-executive directorships in all publically listed companies in Europe (European Union Commission, 2012). In the United Kingdom, the focus of Affirmative Action is on equal opportunity for ethnic minorities (The Sex Discrimination/Election candidates Act 2002). In Afghanistan, at least 64 delegates in the lower house of the National Assembly must be women. The Constitution of Argentina requires that 30 members of Congress be women and out of 350 Parliamentary seats, fifty (50) must be reserved for women. In Belgium, there are seventeen (17) Parliamentary seats for the Flemish minority. In Rwanda, a minimum of 30 per cent of the Senate must be women. In

the Chamber of Deputies, 24 out of 80 seats are for women. In 2008, the people of Rwanda elected 45 women to the Parliament. This made Rwanda the first country with a female majority in its national Assembly. Tanzania also reserves 15 out of 255 Parliamentary seats for women. Likewise, the Ugandan constitution reserves a woman's Parliamentary seat for each district of the country. The Malaysian New Economic Policy (NEP) favors ethnic Malays who historically were a lower income group compared to the Chinese who dominated businesses and industries. In Canadian universities, special preference is given to people of Aboriginal origin.

In South Africa, the apartheid government's apparatus legally favoured Afrikaner-owned companies. This was enforced by legislation such as the Mines and Works Act, the Job Reservation Act, the Native Building Workers Act, the Apprenticeship Act, and the Bantu Education Act. This caused inequality in education, employment and income that still affects South Africa today. After the transition to a democratic South Africa in 1994, the African National Congress (ANC)-led government adopted Affirmative Action legislation through a policy of employment equity. The policy mandates employers to employ disenfranchised groups. The Employment Equity Act and the Broad Based Black Economic Empowerment Act (BBBEE) are in place to restore equity and equality in workplaces. They advance the rights of people of colour, women and people with disabilities. All companies that employ more than 50 people are obliged to comply. Some argue that the law causes disproportionately high costs for small companies and businesses and rewards the black middle-class at the expense of the poor.

Studies have shown that the number of women architects in the US, rose from 3% to 19% between 1972 and 1993, owing to the effect of Affirmative Action. In the same period, it was found that the number of female doctors more than doubled from 10% to 22%. The same was found in numbers of female lawyers which grew from 4% to 23%. In field of engineering, the same study showed that the percentage of female engineers rose from less than 1% to 9% and that of chemists from 10% to 30% over the period of 1970-1993 (Leonard, 1990; Lott & Ramseyer, 2011).

### **2.5.2 Affirmative Action and the theory of Mismatching**

Affirmative Action has been demonstrated to be inherently unequal. Studies showed that the policy can cause students to be placed into fields of study, which may be beyond their capability

and, for that reason; it engineers failure and high dropout rates (Sander, 2004). Professor Sander found that due to Affirmative Action, black college students in the US were four times more likely to fail bar exams than white students did, and that black and Hispanic students were more socially integrated in colleges where they were admitted on the basis of merit not race. He concluded that the beneficiaries of Affirmative Action are often not benefitted but harmed by the policy. In his study, published in the *Standard Law Review*, Professor Richard Sander stated that black students in law school in the United States of America dropped out of law school and failed bar exams due to the mismatching effect (Sander, 2004). It is worth noting that Professor Sander's study on mismatching was unanimously disapproved by a number of law professors, who theorised that eliminating Affirmative Action policies would drastically reduce the number of black lawyers in the United States of America by 12.7 per cent (Chambers et al, 2005).

### **2.5.3 Affirmative Action and inequality**

Opponent studies on race-based Affirmative Action have found that the policy actually benefited the better off rather than the worse off. In a study by Jaffrelot (2006), the impact of Affirmative action was found to be more political than socioeconomic. Affirmative Action was found to stigmatise its beneficiaries, as it creates a sense of false entitlement. This discouraged hard work according to the study. In line with a study by Sowell (2004), Jaffrelot found that the policy encouraged the better off to take advantage of group preferences. In another study Estevan, Gall and Morin (2018) found that Affirmative Action benefitted historically disadvantaged students from public schools (Estevan, Gall and Morin, 2018). However, this was found to be the case where special consideration was given to students from less competitive districts and high schools.

### **2.5.4 Affirmative Action and reverse discrimination**

Lynch (1989) found that Affirmative Action encouraged discrimination. The study found that it promoted what it sought to eliminate. This argument characterises Affirmative Action as contradictory (Lynch, 1989) as it claims that it replaces competence with mediocrity (Arcidiacono & Lovenheim, 2016). Instead of the most qualified, the study claimed that opportunities were offered based on certain race, ethnicity or gender (Sander, 2004). It made an

argument that entry into a job or college should be by merit and that the present generation cannot be punished for injustices created by history, custom and tradition (Sander, 2004). Nevertheless, it is important to recognize that historical inequalities and injustices still exist (Anderson, 2004). It is for this reason that Affirmative Action is viewed in the light of inclusion rather than exclusion (*Does diversity make a difference?*, 2000). Supporters for Affirmative Action argue that the policy opens doors to those previously excluded for social, cultural and historical reasons (Ayres & Brooks, 2005; Holzer, 2006; Leonard, 1990). They contend that it promotes workplace diversity (Sowell, 2004).

## **2.6 The feminist knowledge base**

### **2.6.1 Gender and distribution of education**

The vulnerabilities of women and girls in education go far beyond location and social position. They are nuanced and complex as they are intricately linked and intertwined in cultural, social and historical contexts (Oyewumi, 2003; 2005; 2011). Gender is a major factor in educational inequality worldwide. Gender may either hinder or enhance the ability to attend school and study with proficiency. Around the world, girls and boys still do not enjoy the same opportunities for professional formation. Gender restricts the ability of women and girls to explore their full potential. It leaves them vulnerable to marginalisation in education and in all aspects of public life. It is estimated that more girls than boys stay out of school and that the gender gap is most prominent in Africa due to the importance of the role that parents give to their children based on gender differences. Girls are groomed from childhood and often pulled out of school to be mothers and housewives. This adversely affects their education, socialisation and the career opportunities open to them.

The concept of gender locates its theoretical origin in the feminist epistemology. In literature, it belongs to a family of multi and interdisciplinary problem oriented and problem solving approaches in which dominant worldviews are deconstructed or denaturalised to interpret complex social phenomena through discourses and concepts that contribute to their establishment, maintenance and legitimisation (Wodak & Meyer 2009; 2016). It is an interdisciplinary problem-oriented and problem-solving concept, used to interpret complex social

phenomena. It is a concept of a multifaceted nature. Its relevance, meaning and functions are fluid and contentious. It varies depending on contexts, politics and epistemologies. In social sciences, gender can be understood as an analytical or a socially constructed category employed in everyday life (Nicholson, 1994; Haslanger, 2000; 2012), or simply as a free-floating signifier (Hall, 1997a).

According to Hall (1997a; 1997b: 32), gender is both socially constructed as well as culturally and historically specific. It belongs to a sphere of power that applies sexual difference as a mark to naturalise men's dominion over women (Haslanger, 2012; Mathieu, 1989; Delphy, 1993). In this analogy, gendered subjects are those whose positions of domination or subordination are marked and justified by certain sexual "bodily features, presumed to be evidence of" the subjects' "biological" role in reproduction (Haslanger, 2012: 234). This conceptualisation indicates gender as a factor of social relations, rooted in historical processes in which women's time, labour, and the products of their bodies are appropriated for the imposition of their sexual obligations and caring duties. Because gender interacts with other social categories, it is a heterogeneous unit of analysis (Mikkola, 2016). It produces the notion of the diversity of the social positions that determine empowerment of some and disempowerment of others (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66). This conceptualisation provides an analytical framework that encourages analysts to bring to the fore the issues of both the marginalised and the privileged.

The study conceptualises the role, functions and implications of gender in the context of the governance of the distribution of public education in Uganda, focusing on gender as a category of analysis and transformation. The significance of gender as a category of transformation in respect to distribution of education in Uganda cannot be ignored. As a social mark, gender "... helps to vet the criteria of who belong and who do not" (Donzelli, 2018: 64). Gender is a special object of policymaking. In the study, the concept of gender is understood as an analytical category, whose relevance, meaning and functions vary, depending on contexts, politics and epistemologies. Gender also plays regulatory role. In the context of policy, it works as a filtering mechanism and means of stratification to engender multiple processes. These may be considered as processes of internal exclusion, differential exclusion, and segregation to provide potential

social advancement within a hierarchical framework (Mezzadra & Neilson, 2013.). It provides codes and regulations in which women's potential social advancement may be encouraged or discouraged (Yuval-Davis, 1997: 12).

### **2.6.2 Social location and distribution of education**

Educational inequity is a complex phenomenon. According to the Feminist Standpoint Theory, access is theorised as “grounded in historical socio-economic context and varying according to particular Standpoints” (Mamo, 2005: 358). The Standpoint Theory conceives the role of location as either facilitating, debilitating or inhibiting access. The theory embeds the notion that social location and social position afford some benefits to epistemic groups. Depending on location, this may facilitate some, while debilitating and inhibiting access for others. This benefit of access is termed in the Feminist Standpoint Theory as “epistemic advantage” and is theorised as specific to “particular Standpoints or context” (Intemann, 2010: 784).

Inequality is viewed as a function of marginalisation in all aspects of public life, including limitation to access to resources and imbalances in the distribution of quality as well as quantity of educational inputs and outputs. Members of a society may be at a disadvantage because of physical barriers, owing to their social location or social positioning in society. These may impair learning outcomes and create unequal differences in the quality of learning achievement. The concepts of social location and social positions are important in the distribution of education as a social phenomenon, most especially in contexts where educational gaps exist. This may account for patterns of repeated intergenerational choices of poor schools and vicious cycles of cause and effect, which condemn children from poorer backgrounds to a lower quality education, with less opportunity to proceed to higher education. Location has the potential to marginalise and isolate people from all aspects of public life, such as health, economy and politics, with lasting effects on people's welfare and development (Oyewumi, 2003; 2011). This makes poverty self-perpetuating and social mobility practically impossible. Social location and social position are identified as factors in educational and social inequality globally. They condemn those born in poor environments to remain poor. This transmits educational inequality and the legacy of poverty from generation to generation. Subsequently, educational inequality means poorly educated people have no skills, no jobs and much less access to higher education, as it is

university and technical education that provides the knowledge and skills essential in coping with the growing specialised sectors of an economy.

## **2.7 Input measures of the distribution of education**

### **2.7.1 Gross enrolment rates at primary level**

According to UNESCO, the Gross Enrolment Ratio (GER) in education grew significantly between 1990 and 2014, with the biggest gains in sub-Saharan Africa and the Arab States (UNESCO, 2012). By 2009, nearly two-thirds (128) of 193 countries covered by the UNESCO's 2012 report had achieved gender parity in primary education. There were more boys than girls in 57 out of 65 countries that did not achieve gender parity in primary enrolment. The same UNESCO statistics show that half of the countries in Latin America, the Caribbean, as well as from East Asia and the Pacific, had already achieved parity by 1970. Over the same period of 1970-2009, there were regions of the world that witnessed a decline in participation in primary education. Among these was Central Asia, which witnessed an eight per cent decline in GERs. GER in Central and Eastern Europe also dropped below 100 per cent. According to UNESCO, the decline was not a cause for concern these regions given that their Net Enrolment ratios (NET) have remained at nearly 100 per cent for over 40 years.

### **2.7.2 Gross enrolment rates at secondary level**

At the global level, the average secondary school gross enrolment ratio (GER) rose from 48 to 69 and 39 to 67 per cent for males and females respectively between 1970 and 2009. In Latin America and the Caribbean, GER for females more than tripled, from 27 to 93 per cent, compared to that of the males, which increased from 28 to 86 per cent (UNESCO, 2012). Central and Eastern Europe registered the smallest gains over this period, given that they were already at the peak of participation. At the participation rate of 43 per cent by 2014, Africa lagged behind in secondary education. North America, Europe and Central Asia were leading in gross enrolment ratios for secondary education. The worst performing countries in sub-Saharan Africa over four decades included the Central African Republic at 17%, Chad at 22%, Mozambique 22%, Uganda 8%, Burkina Faso 30%, Ethiopia 36% and Eritrea at 36%. By 2006, sub-Saharan Africa had the lowest GERs for secondary education (below 45%). Clearly, the enrolment gains

in Africa at secondary level have not been as impressive as those at the primary level (UNESCO, 2012).

### **2.7.3 Gross enrolment rates for higher education**

The decades from 1970 to 2009 witnessed significant expansion in higher education globally. Overall, female enrolment at the tertiary doubled that of males. By 2009, tertiary enrolments in sub-Saharan Africa had grown 24 times from that of the 1970s, 17 times in the Arab States and 15 times in East Asia and the Pacific. According to UNESCO, globally, 25% of the countries achieved GERs ranging from 20 to 50 per cent for tertiary education, the lowest GER for tertiary education (9%) was in sub-Saharan Africa, compared to the 21% for South Asia, 36% for the Middle East and North Africa, 44% for Latin America and 86% for North America. The highest tertiary education enrolment in the world (estimated at 52 million) was in East Asia and the Pacific region. Globally, women accounted for a majority of tertiary education students in most countries. UNESCO's data shows that female's participation went from a minority in 1970 to a majority in 2009 in all regions of the world, except Africa. Out of 149 countries, women were favored in 93, while men in only 46 (UNESCO, 2012).

### **2.7.4 Survival and completion rates**

Survival and completion – the trajectory by which students, progress through school – has been identified as a key aspect of educational distribution. Once children are enrolled in school, focus shifts to their survival to the last grade of primary school. This varies considerably across the world. Persistence to grade 5 has been used as the first step in the measure for survival. This refers to the percentage of the grade 1 cohort reaching grade 5 in any given cycle. The second stage of survival is the persistence to the last grade of primary school (UNESCO, 2012). Over the period 1970-2009, completion rates in sub-Saharan Africa were noted to have improved by 17 and 16 percentage points respectively for girls and boys. Overall, 45% of the 173 countries surveyed by UNESCO had completion rates of 95 percent or higher. In 25% of countries, four out of five pupils (80%) did not complete primary education between 1970 and 2009. By 1999, primary school completion rates were less than 60% in 18 African countries (49% of countries) represented in the UNESCO's statistics. Primary school completion rates for the African region

stood at 49% for females and 59 for males, rising to 66% for females and 72% for males by 2014. It must be noted that, by 2014, sub-Saharan Africa ranked least in the world with primary school completion rates below 90% for both genders. The biggest gains in female completion occurred in South Asia, where primary school completion rates went up to 90% by 2014 from 59% in 1999. Globally, it increased from 77% and 84% in 1999 to 91% and 93% in 2014 for females and males respectively. Sub-Saharan Africa was among the three regions where the largest gains in completion rates occurred, the rest being South and West Asia, and the Arab States (UNESCO, 2012).

The only African countries with primary school completion rates above 80% by 1999 were Botswana (93% for girls and 87% for boys), Cape Verde (104% for girls and 100% for boys), Namibia (99% for girls and 90% for boys), South Africa (87% for girls and 83% for boys) and Zimbabwe (88% for girls and 93% for boys). Only eight countries (21%) in Africa had a completion rate above 80% by 2009. In 11 countries (30%), completion rates fall within the range of 61-71% (UNESCO, 2012). One in five children in sub-Saharan Africa did not complete primary school. Depending on context, completion rates vary, from 27% for females in South Sudan to 85% in Lesotho, and from 40% for males in Eritrea to 82% in Zambia. According to UNESCO, primary school completion rates were highest in Kenya (104% and 105% for girls and boys), Botswana (101% for girls and 98% for boys), Cape Verde (98% for girls and 101% for boys) and Ghana (96% for girls and 97% for boys). Some of the countries where girls have edged boys in completion rates include the Democratic Republic of Congo, Burkina Faso, Cameroon, Equatorial Guinea, the Gambia, Guinea Bissau, Lesotho, Madagascar, Rwanda, Mauritania, Senegal, Swaziland and Tanzania. By 1999, Niger, Mozambique, Ethiopia and Eritrea were among countries with the lowest completion rates. By 2014, completion rates in sub-Saharan Africa had improved at primary level, from 15% for females in Niger in 1999 to 52% in 2014 and from 14% in 1999 to 53% for females in Ethiopia in 2014. Of the 166 countries with data globally (UNESCO, 2012), 47 per cent recorded a school life expectancy (SLE) of 12 years or less. Globally, 65 per cent of school age children live in 42 per cent of countries with SLEs in the range of eight to 12 years. It is clear that all African countries face serious disparities in transition through school (UNESCO, 2012).

### **2.7.5 Repetition of grades**

Repetition remains a continuing obstacle to equity in education. This tends to occur during primary school (UNESCO, 2012). The repetition rate is an indicator of internal inefficiencies of an education system. Globally, 4.9 per cent of pupils repeat grades during their primary years (UNESCO, 2012). Male repeaters outnumber females in 75 per cent of countries (UNESCO, 2012). Half of the countries that have the lowest repetition rates in the world are those that achieved gender parity. According to UNESCO, nearly a third of countries globally have less than one per cent of children who repeat grades, while around a quarter have percentages ranging between one and five per cent. Sub-Saharan Africa has the highest repetition rates in the world, with eight per cent for females and nine per cent for males respectively. In Burundi, 32 per cent repeats a grade (UNESCO, 2012).

### **2.7.6 Drop out rate**

Another measure of educational distribution is the dropout rate. According to UNESCO, sub-Saharan Africa recorded the highest school dropout rate in Eritrea and Djibouti (63 and 55.4 per cent) respectively (UNESCO, 2012). Thirty nine per cent of countries in the region registered rates above 20 per cent, compared to a global average of 13 per cent. Among 48 countries globally, with dropout rates of less than five per cent, Mauritius is the only country in sub-Saharan Africa. Of the 33 countries where dropout rates are greater than 30 per cent globally, 20 are found in sub-Saharan Africa. In Chad, 70 per cent drop out at primary level. Studies show that girls progress through school in a timelier manner than boys do. This was the case in Lesotho, where dropout rates for boys was 62 per cent compared to 44 per cent for girls. In Sudan and Aruba, boys are five times more likely to drop out of primary school than girls are (UNESCO, 2012).

## **2.8 The role of social position, income and wealth in the distribution of education**

One way to look at how education is distributed is to focus on which country devotes more resources to education than another (the input/resources approach). This is what has become known as the input or resource dimension of educational distribution. The dimension assesses the

distribution of education by measuring inputs/resources using indicators such as pupil-teacher ratio, enrolment rates, and survival, completion and repetition rates as well as on government spending and public expenditures on teachers' wages, books, reading materials and learning aids. The second dimension is the output dimension of educational distribution. This measures levels of educational attainment in comparisons to income and wealth distribution of the population (Psacharopoulos and Arriagada, 1986; Barro and Lee, 1997; 2000; 2010). A common method used in output approach is the Education Gini coefficients, calculated using income and financing data. Applying this method, Rati Ram (1990; 1989; 1988) found that as the average level of income rose, educational inequality first increases, and after reaching a peak, it starts to decline. The turning point was about seven years of education (Ram 1990; 1989; 1988). However, the input and output dimensions do not represent or measure the concepts of social location, which this study seeks to explore. It leaves a gap, as it does not provide room for a thorough examination of the meaning, function and implications of student's district of origin and high schools on the distribution policies and systems of public university education in Uganda. To address this gap, the concepts of Equity Distance and Equity Index were developed from the Feminist Standpoint Theory of social location to assess the social phenomenon of educational inequality from the perspective of the students' district of origin. The study conceives the discourse of Equity Distance to examine if and how students' district of origin matters in Uganda's public university educational distribution system; the potential benefits it may provide to epistemic groups that are specific to the Standpoint Theory; the variations in social phenomena among multiple groups of districts involved; and the limitations rendered in specific locations with regard to access to the public university educational distribution system.

The application of the inter-categorical approach of feminist theories was adopted (McCall, 2005) in the construction of the Equity distance index. This made multi-group comparative analysis of the phenomenon possible across regions and districts of the country. The inter-categorical approach hypothesises potential existence of inter-group differences and inequalities (Jayadev & Reddy, 2011). It focuses investigation on "comparative multi-group studies" and examines variations "among already constituted groups" (McCall, 2005: 1784-85) that constitute each category (McCall, 2005: 1786-87; Donzelli, 2018), drawing special attention to those in privileged and those in subordinate positions (Donzelli, 2018). Based on the inter-categorical

approach, the concept of Equity Index (E) was coined as a measure to illuminate the notion of social position of districts to public university education, i.e. the degree of relative ease or difficulty of access to public university educational opportunities from different districts of Uganda based on the discourse of social location.

## **2.9 The Feminist Standpoint Theory of knowledge**

The Standpoint Theory states that access to social phenomena varies according to location. The different locations or contexts, which influence access, are referred to as particular Standpoints. Given limitations in context, access to social phenomenon is theorized as “grounded in historical socio-economic context of locations” (Mamo, 2005: 358). This theorization requires analysts to take into account the historical, social and economic context of location of the epistemic agent in the investigation of the social phenomenon of inequality. In the Standpoint Theory, social location is thought to provide some benefits to epistemic groups that are specific to their location or social position. It is this benefit derived, based on the notion of location, which is known in this theory as “epistemic advantage” (Intemann, 2010: 784) summarised by Intemann as follows:

*“Social location systematically shapes and limits knowledge production and access to resources from a particular Standpoint” (Intemann, 2010: 783).*

In this study, the student’s social location is conceived as the districts of origin. The student’s high school equates to his or her social position in the public university distribution policies, systems and practices. It is the students’ districts of origin and the district of location of his or her high school, which is conceptualised to systematically shape and limit knowledge production and access to public university educational opportunities as a resource (Intemann, 2010: 783). Any potential advantage in access to the public university distribution system that is specific to the student’s district of origin and district of location of high school is equated to the feminist discourse of epistemic advantage. As a Standpoint, the concepts of Equity Distance and Equity Index are designed to measure the concept of social location and social position of students’ district of origin. It provides a unit of analysis that allows the study to examine the phenomenon of inequality in the distribution of public university educational opportunities in Uganda from multiple and conflicting dimensions of 112 districts. Equity Distance and Equity Index are vital

measures in assessing the potential existence of inter-group differences and inequalities in access to public university educational opportunities from the multiple and conflicting dimensions of resource allocation and distribution policies, systems and practice (McCall, 2005).

## **2.10 The theoretical framework and its conceptual narratives**

The theoretical foundation of the study is located in the feminist theories of knowledge, in particular, in Gender and Standpoint theories (Wodak & Meyer, 2009; 2016). Its theoretical relevance can be located in the disciplines of public policy and good governance (Asian Development Bank, 1995; Dwivedi, 2001), elaborated in Haberman's theory of communicative and strategic action and Foucault's conceptualisations of power and decision-making (Van Dijk, 2007). It builds from diverse sources of knowledge that are not limited to but are inclusive of the works of Collins (Collins, 1990; 2004; Collins & Bilge, 2016) and Harding (2004); and that of Hartsock (1998) whose prominent contribution to the Feminist Standpoint Theory draws specific attention to the discourses of gender, location and social positions as special objects of analysis and a relatively new phenomenon in policy making. The study learns from the contributions of Intemann (2010), Kim-Puri (2005) and Kim (2007) whose work on the feminist Standpoint Theory and gender epistemologies extends the meaning, functions and implications of these discourses into the concept of power (Intemann, 2010; Kim-Puri, 2005; Kim, 2007). Building on this platform, the study situates its theoretical and empirical relevance in feminist literature in ways that ground its theoretical base firmly on feminist epistemologies (Intemann, 2010; Stone-Mediatore, 2007; Donzelli, 2018). Based on the feminist epistemology of Gender and Standpoint theories (Wimmer & Schiller, 2002), the study locates the conceptual framework of analysis and interpretation on the discourses of equity, location, social position, gender and Affirmative Action.

In particular, the Fair Share Equity Framework is based on the feminist Standpoint theory- the notion that the social phenomenon of inequality is socially, historically and culturally situated and that its investigation and analysis must be situated in the context of the location of the social phenomenon itself (see studies by Intemann, 2010 and Mamo, 2005). According to the Feminist Standpoint theory, access to resources such as higher educational opportunities is "grounded in historical socio-economic context and varies according to "particular Standpoints" (Mamo, 2005:

358). In the Standpoint Theory, location matters as a factor in knowledge production and access to resources. It influences the degree of relative ease or difficulty in access to educational outcomes and opportunities from one district of the country to another. This conclusion is drawn from the feminist theory Standpoint theory which states that, “*Social location systematically shapes and limits knowledge production and access to resources from a particular Standpoint*” (Intemann, 2010: 783). On that basis, location offers a scientifically authentic perspective in the investigation of the social phenomenon from the feminist theoretical Standpoint. It offers a discourse in which equity can be investigated based on the policies, systems and practices responsible for the distribution of quality education, By so doing, it provides a framework of analysis which takes ‘Fair Share’ into account as a primary consideration for access-with students eligible for admission being those who are qualified from schools located within each district and ranked in the top categories of performance across the district.

The fair Share framework also relates to a socially critical perspective, found in literature, which focuses on the social studies of inequality (see studies by Raffo., Dyson., Gunter., Hall., Jones and Kalambouka, 2007). Similarly, this perspective attributes the social phenomenon of inequality to gaps in policy, systems and practices of distribution, and provides a lens that focuses investigation on policy elements and parts, which may count for educational inequality and explain disparities between regions and districts of the country. Finally, the Fair Share Framework relates to the Post Colonial gender theories (Oyewumi; 2003; 2005; 2011) which emphasise that equity and equality should not be defined from the perspective of gender alone. Geography and demography should be taken into account and, that in the post-colonial era, equity and equality can only be achieved if the realities of those who are historically, socially and culturally disadvantaged are addressed. It cannot be achieved by addressing the issues of women or groups who are relatively better off. The above theoretical perspectives informed the development of the concepts of Fair Share, Fair Share Index, Equity gap, Equity distance and equity distance index, as well as their application in the Fair Share Equity Framework of analysis, to respond to all five objectives of the study in ways not previously reported.

Located in Mamo’s (2005) and Intiman’s (2010) conceptualisations of the feminist Standpoint theory-particularly the concepts of social location, social position and epistemic advantage, the

framework defines equity as 'Fair share' and recommends that in order to achieve equity in higher education, participation should be determined on the basis of 'Fair Share' formula. It constitutes the Fair share index system, and pioneers the concept of equity index of education as a measure of inequality to incorporate equity as a third dimension of educational distribution. It classifies 112 districts of Uganda in three equity categories and identifies areas of the country where equity gaps in public university education are most concentrated. It argues that no one who meets the first criteria must be denied a place in the institution of their choice just because he or she comes from a disadvantaged background (Barr, 2004 p.266). It draws attention to how policies, systems and practices responsible for the distribution of public university educational opportunities produce, reproduce, naturalise and legitimise higher educational inequality over the years. For this reason, the Fair Share framework is concerned with the role of public policy in ensuring equity and equality in access to public university education, in a country like Uganda where the number of places available is limited. It demonstrates what constitutes a 'fair system' of distribution and how inequality in public university educational distribution can be addressed. It shows how equity can be achieved-with students eligible for admission under the national merit system being those qualified from schools located within each district and ranked in the top categories of performance across the district

### **2.10.1 Equity**

How does the population quota of regions and districts of Uganda influence the distribution patterns of public university educational opportunities in Uganda? Every citizen has a stake in the distribution and allocation of resources in his or her country. This is what equity as a concept in the distribution of education stands for. It relates to the discourse that the policies, systems and practices used for allocation and distribution of resources should leave none of the different parts of society excluded from the mainstream of development. This requires governance policies, systems and practices that ensure that all groups have equal access to development opportunities for their well being and development. Equity refers to fairness in decision making, particularly in the distribution of the benefits of development (Meyer et al., 2013). It is about effectiveness and efficiency in decisions at the level of national institutions responsible for producing results and meeting the needs of citizens in all regions and districts of the country (Wahab & Rahman,

2011). It is about openness, transparency and accountability in sharing the benefits of the distribution of resources in a manner that is equitable and responsive to the needs of communities and individuals (Asia Development Bank, 1995).

In Uganda, significant equity and gender-gap is known to exist at all levels of education. By 2014, females constituted 46.9% in secondary schools. Thirty-four (34) per cent of students who completed senior four (Grade 11) were girls, in contrast to forty-five (45) per cent of boys. Senior five (Grade 12) female transition rate was 25.9 per cent compared to 33.6 per cent of males. At pre-primary level, the gross enrolment rate was only nine point seven (9.7) percent, with major rural-urban disparity in enrolment and regional imbalances in the distribution of Early Childhood Development (ECD) centres. Thirty-three per cent of ECD centres were found in the central region, 10% in the western region and only 2% in Karamoja – the northeastern region (MoES, 2016). The majority (86.5%) of pre-primary teachers were females. The private sector-led pre-primary sub sector was associated with very high costs. This marginalised the participation of children in rural areas and from poor families.

Due to very high levels of dropouts, the survival rate to primary seven for girls was at 32.9% and 33.1% for boys in 2015. This level of retention was one of the lowest in the region (MoES, 2016). The numeracy rate at primary six for girls was at a low 37.4% compared to 45.8% for boys in 2015. Sixty-nine per cent of Ugandan adolescent girls have never attended secondary school in spite of the introduction of Universal Secondary Education (USE) in 2007. By the age of 18, 40% of girls were married (MoES, 2016).

In spite of the introduction of Affirmative Action in 1991 and the Science Policy in 2004, the number of girls in sciences is critically low. Female teachers constituted only 23.6% at the secondary school level. This creates gaps of role models, counselors and advocates, which further disadvantages the girls. Seventy per cent of students at tertiary level were men. Out of every ten women enrolled at tertiary level, seven dropped out by year three. While total enrolment in year three for men is 71.4 percent; that of women is 28.6%. This reflects high dropout rates among women in Business, Technical, Vocational Education and Training (BTVET) colleges. Seventy-three per cent (a majority) of instructors are males. This calls for deliberate interventions to promote equal opportunities for women and men, and mainstream

gender in Uganda's education system (MoES, 2016).

With large educational gaps between districts and schools across the country, students from disadvantaged schools located in poor remote districts of the country have much less access to schools with more resources. This often leads to major differences in the quality of schooling and inequality in the distribution of public university educational opportunities. These factors could confound the cause and effect of policies such as Affirmative Action and complicate the desired aim of this assessment.

### **2.10.2 The Fair Share Equity Framework**

Studies show that educational inequality is a result of disparities in the social contexts or location of the population (see studies by Raffo., Dyson., Gunter., Hall., Jones and Kalambouka, 2007). Using a national database on educational attainment of 40 countries, Banerjee (2015, 2016) showed that geographical forms of inequality in education is socially, historically and culturally situated. The study demonstrates that students from disadvantaged areas were most likely to be excluded, particularly from science education-technology, engineering and mathematics (STEM). It concludes that this was not the result of the school attended, but the circumstances in which schools and communities found themselves.

The Fair Share Equity Framework of analysis refers to a comprehensive set of tools that entails the application of the six concepts of equity-Fair Share, Fair Share Index, Equity Index, Equity Gap, Equity Classification and Equity Distance to comprehend the phenomenon of inequality in the distribution of public university education. In the framework, the Fair Share Index represents the proportion of resource allocation or the public university student population for which each district of the country is entitled, if the share of allocation of the student population or any national resource to each district was based on a population quota policy and system of governance. The Fair Share Index (FSI) is conceptualised to signify an appropriate Fair Share of resources, or public university student population required for each district of the country to achieve equity in distribution of public university educational opportunities under the population quota-based policy and systems of governance.

In the Fair Share Equity Framework, the population quota equates to a Fair Share Index (FSI) of

public university education. It is used as a measure/indicator of equity, to facilitate multiple group comparisons of the phenomenon along multiple districts with conflicting dimensions. It constitutes the percentage of public university student population for which each district of the country would be entitled, if the allocation of the student population was based on population quota, following the population quota-based policy and system of governance. The Fair Share Index represents an appropriate Fair Share of public university student population needed for each district of Uganda to achieve equity in distribution of public university educational opportunities. It equates to the population quota of a given district of the country, calculated based on the country population figures from a given base year.

The Fair Share Equity Framework builds on the concept of equity to explore the phenomenon of inequality in the distribution of public university education. It uses the Fair Share Index and the actual proportions of public university student population allocated to each of the four regions and 112 districts of Uganda as the main source of information, to analyse of the Fair Share Gap or Equity Index in public university education by region and district of the country. The index reveals the potential meaning, functions and implications of district population quota as a proxy for equity. It explores if and how the distribution of public university student population varies, depending on the configuration of the population quota from one region and district of the country to another in response to the modes of governance used or policies and systems responsible for its distribution in regions and districts of the country.

### **2.10.3 Equity Index of public university education**

Through the Fair Share Equity Framework, the study uses the Equity Index (EI) as a measure of inequality in higher educational access and distribution. The difference between the actual proportion of public university student population of the region or district (a) and Fair Share Index (b) is understood and treated as the Equity/Fair Share Gap in public university education. Based on the Equity Gaps established between one region/district and another, districts with the largest education Fair Share Gaps were identified. All 112 districts of Uganda involved in the study are classified into three equity categories, using the combined analytical Fair Share method. This will provide analysts and policy makers with the tool to understand the changing configurations of the phenomenon, identify where Equity Gaps are most concentrated and

develop social policies and programmes to ensure that the benefits of development reach every part of the country. The methodology focuses on the meaning, functions and implications of equity in the phenomenon and simplifies the complexity in investigation and comparison of multi-groups that constitute each category, thereby contributing to the theoretical significance of the inter-categorical approach of the feminist epistemology of the Standpoint theorisation (Mamo, 2005).

#### **2.10.4 Equity gap in public university education**

The concept of Equity Gap was introduced as a strategy to make multi-group comparisons of 112 districts possible (McCall, 2005). The Equity Gap – the difference between population quota or FSI and the actual student population – illustrates the challenge of balancing the multiple and conflicting dimensions (McCall, 2005: 1784-85) of the social phenomenon with changing configurations of policies, systems and practices used for the distribution of public university educational opportunities in regions and districts as social locations. It illustrates if and how the distribution of public university educational opportunities in districts shifts in response to changing configurations and multiple dimensions of social location and population quota, given certain limitations within the context of epistemic groups or study population (McCall, 2005; Intemann, 2010). By this analysis, the study advances the meaning, functions and implications of the feminist discourses of social location, social position and epistemic advantage in the analysis of the phenomenon from a governance dimension.

#### **2.10.5 The Cumulative and Average Equity Index**

The Cumulative Equity Index/Gap and Average Equity Index/Gap (CEI and AEI) in public university education illustrate the meaning, function and implications of the Equity Gap, i.e., the difference between the population quota and the actual proportions of resource allocation on the distribution policies, systems and practices of public university educational opportunities in regions and districts of the country. While the Cumulative Equity Index (CEI) estimates the total number of student uptake opportunities gained or lost in public university educational opportunities by a district over the eight-year period, the Average Equity Index (AEI) expresses the number of missed opportunities for public university education by a district per annum. The

higher the AEI, the more excluded the district is from Public University Education or from the distribution of the resource in question.

The Equity Index (EI) illustrates the meaning, function and implications of the Equity Gap from one region and district of the country to another. Its value is specific to a location. Its theorised base is on the inter-categorical approach, which hypothesises the potential existence of inter-group differences and the changing configurations of the phenomenon from one region and district to another along their multiple and conflicting dimensions (McCall, 2005: 1784-85). The CEI and AEI are measures of losses or gains made in the actual number of public university student population by a district, based on the difference between FSI and FSG (Equity gap). The Cumulative Equity Gap (CEG) is the actual number that represents the cumulative share of uptake in the student population to which a district would be entitled over the eight-year period, if student allocation were based on the FSI or population quota-based policy and system of distribution.

#### **2.10.6 The equity categories of districts in public university education**

Equity categories of districts were established to make a “comparative multi-group analysis” (McCall, 2005: 1784-85) of the phenomenon possible. To cluster districts in each of the three categories, an Equity Regulator (ER) was applied. The Equity Regulator conceptualises potential inter-group differences in the distribution of the phenomenon and the need to prioritise areas of the country where specific forms of social preferences or policy are needed to address the equity and equality challenges identified in public university educational distribution policy and access system. The regulator is based on the feminist theory of inter-categorical approach, which hypothesises that the potential existence of inter-group differences and inequalities among already constituted groups (McCall, 2005), based on the Equity Regulator, are classified into the following three equity categories:

Positive Equity Category (PEC): Districts classified in the positive equity category were those districts whose Average Equity Index (AEI) values or fair share advantage was positive. Negative Equity Category (NEC) refers to districts whose AEI or Fair Share Gaps were negative. These were districts whose proportions of public university student population exceeded their

Fair Share Index or population quota. The third equity category is the Relative Equity Category (REC). This is used to classify districts that fall within an acceptable range of AEI. The purpose of the classification system is to give policy makers the tool to identify and target districts where Equity Gaps are concentrated with appropriate social policy instruments that address concerns on growing levels of inequality in higher education distribution in the country. The classification of districts into three equity categories gives a nuance and understanding of the unique patterns and complexities of the equity conundrum across multiple regions and districts of the country.

### **2.10.7 The Equity Distance approach and the feminist theory of social location**

In a studies conducted in the United States (USA) Reardon (2011) and Steele (2010) showed that more urban students completed high schools than rural students. Welch (2014) demonstrated similar results, in a study, which found that the levels of educational attainment decreased significantly, as households' poverty levels intensified from urban to rural locations. How does location of students' district of origin and social position of high school influence the distribution patterns of public university educational opportunities in regions, districts and public university fields of study in Uganda? In this study, the concept of Equity Distance (ED) was used to examine inter-group differences in the meaning, function and implications of the notion of location of the students' district of origin and district of high school, on the distribution of public university educational opportunities. The study; (a) established, if and how students' district of origin accounts in the understanding of the social phenomenon of inequality in Uganda's public university education; (b) assessed the potential benefits that location may provide to epistemic groups that are specific to the concept of social location in the feminist Standpoint Theory; (c) examined the variations in the social phenomena among multiple groups of districts involved; and (d) explored how limitations in access to public university educational opportunities are rendered in specific locations, regions and districts of Uganda in the context of the distribution system. As a measure, the Equity Distance (ED) to public university educational opportunities estimates the social positions of districts to public university education – the degree of relative ease or difficulty in access to public university educational opportunities from different districts of Uganda. This is based on the feminist discourse of social location of the Standpoint Theory. According to Intemann, "*Social location systematically shapes and limits knowledge production*

*and access to resources from a particular Standpoint”* (Intemann, 2010: 783).

As a measure, the Equity Distance of a district represents the social position of a district in the public university educational distribution system from “*a particular Standpoint*” (Intemann, 2010: 783). It is expressed as a number and shows how far or near students in that district are to public university educational opportunities, relative to those in another. The nearer the value is to zero, the higher the epistemic advantage or relative level of ease of access. The approach conceives the potential existence of inter-group differences and inequalities between districts. It focuses on “comparative multi-group studies” by focusing on variations “among already constituted groups” (McCall, 2005: 1784-85) that constitute each category (McCall, 2005: 1786-87; Donzelli, 2018). It draws special attention to those groups in privileged and those in subordinate positions. The Standpoint Theory of the feminist epistemology grounds the study on the notion that (a) access to social phenomenon “varies according to particular Standpoints” (Mamo, 2005: 358); (b) social location and social position matter; and (c) a Standpoint or social position provides “epistemic advantage” (Intemann, 2010: 784) to groups; and (d) this advantage is specific to the context of location. It provides for the use of the concept of location in the assessment of potential variations in social phenomenon among already constituted groups and its “changing configurations along multiple and conflicting dimensions” (McCall 2005: 1784-85). In the context of the Standpoint Theory, (a) district of students’ origin; (b) district population quota; (c) students’ high school; (d) public university field of study; (e) gender; and (f) beneficiaries versus non beneficiaries of Affirmative Action programme are conceptualised as different “Standpoints” for access to the social phenomena (Mamo, 2005: 358). Each of the “Standpoints” functions as a social category and unit of analysis, “grounded in historical socio-economic context” (Mamo, 2005: 358).

### **2.10.8 The classification of districts into equity categories**

Districts were clustered into equity categories to illustrate the meaning, function and implications of the notion of “Standpoints” in the social phenomenon. The equity categories are “grounded in historical socio-economic context” (Mamo, 2005: 358) of districts. The Equity Distance (ED) of each district was translated into a National Equity Index (NEI). NEI is a numerical value that represents the social location of one district of the country compared to another for public

university education. The index makes multiple group comparisons possible. NEI is estimated as the quotient of the difference between national and regional ranks in student population in each district. It illustrates the variations Equity Distance or social position in the public university educational distribution system from one district to another. Whereas a NEI value of zero indicates the highest level of epistemic advantage, a value near one indicates the highest level of epistemic disadvantage for males and females in the district. The higher the NEI in a district, the higher levels of inequality in the distribution of public university educational opportunities between that district and another and thus the higher the need for more prominent forms of social policies, systems and practices to address the public university educational gap.

The concept of Equity Distance (ED) embedded in the NEI theorises potential (a) benefits to epistemic groups and variations in social phenomena among multiple groups of districts involved in the study; and (b) limitations rendered in specific locations, or regions and districts of Uganda in access to the phenomenon. It is specific to the relevance of the feminist Standpoint Theory of social location to this study. The term ‘Equity Distance’ was conceived as a measure of the concept of social location. It refers to the relative level of ease or difficulty, in access to public university educational opportunities from a district, in the context of the policies, systems and practices responsible for the distribution of public university educational opportunities in regions and districts of Uganda. It measures the degree of relative ease or difficulty in access to public university educational opportunities from different districts of Uganda based on the feminist discourse of social location of the Standpoint Theory.

#### **2.10.9 The high schools factor**

How does the location of students’ high schools influence the distribution patterns of public university educational opportunities in regions, districts and public university fields of study in Uganda? To examine if and how students’ high school matters in Uganda’s public university educational distribution system, the feminist theory of social position was used to conceive the potential benefits high school provides to epistemic groups that are specific to its social position. A sample of 101 504 students enrolled in five public universities in Uganda from 2009-2018 and from 112 districts of Uganda was used as the main source of knowledge to assess the role and functions performed by high school as a factor of social position in the policies and systems

responsible for the distribution of public university education in Uganda. The purpose of the high school, as a unit of analysis, was to explore if and how the distribution patterns shift depending on one's high school, in response to the significance of the feminist discourse of social position in public university educational distribution policies, systems and practices of governance. Up to 1 178 secondary schools accounted for the student population of 101 504. The distribution of the public university student population was analysed by the number of high schools that accounted for the public university student population from 2009 to 2017. Following this analysis, the distribution of the high schools in Uganda was analysed by region and district. The proportions of the student population qualifying from the high schools located within each region were established and compared with the proportions of the location of the top 100 secondary schools of qualification in the region. This was to determine the extent to which access to the top high schools influences the public university educational distribution system.

The feminist discourse of social position hypothesises potential existence of inter-group differences and inequalities in the student population among high schools. The ranking methodology focused on drawing attention to these differences, to analyse inter-group differences and inequalities between those schools in privileged and those in subordinate positions (Donzelli, 2018), in the context of the public university educational distributional policies, systems and practices. To establish the social position of the high schools involved in the system, a twenty-one (21) hierarchy of the secondary school system was established. This was used to cluster high schools according to their social positions in the public university admission system.

Based on the feminist Standpoint Theory (Mamo, 2005: 358), the study conceives the student's high school as "*a particular Standpoint*" for knowledge production and access to social phenomena. As a Standpoint "*grounded in historical socio-economic context*", the high school is understood as a factor which "*systematically shapes and limits knowledge production and access to social phenomenon*" (Mamo, 2005: 358) in the context of policies, systems and practices responsible for the distribution of public university educational opportunities. It provides a conceptual framework that allows the study to examine the phenomenon from multiple and conflicting dimensions, assessing the potential existence of inter-group differences and

inequalities in social positions among schools in the 4 regions and 112 districts of the country (McCall, 2005). It provides the basis for comparative multiple group analyses of the phenomenon, to assess whether social position matters among multiple groups of schools, in specific locations and in the context of Uganda's public university educational distribution system.

#### **2.10.10 Affirmative Action and the feminist approach to knowledge**

To what extent does Affirmative Action influence women's representation in public university education in Uganda? Uganda's Affirmative Action policy in public university education came into force in 1991. Prior to its emergence, female students' admission in Makerere, the only public University in Uganda at the time, was below 15 per cent (MoES, 2012). Affirmative Action is theorised to create opportunities for previously disadvantaged groups (Chambers, Clydesdale, Kidder & Lempert 2005; Leonard, 1990; Rubinfeld, 1997). It is related to fairness and social justice (Anderson, 2004; Robertson, 2008) and to the goals of diversity, equity and equality (*Does diversity make a difference?*, 2000; Butto et al., 2006). Opponents of the policy contend that it compromises quality (Arcidiacono & Lovenheim, 2016) and amounts to reverse discrimination (Borowski, 2012; Espenshade & Walton, 2009). Some argue that it must be ended (Eastland, 1996; Pojman, 1998) because it equates to justice done at the expense of others (Espenshade & Chung, 2004; 2005; Lynch, 1989) and that it tends to benefit the most privileged among the designated groups (Bowen & Bok, 1998). To examine the contribution of Affirmative Action to women's representation in public university education in Uganda, the study considered what would have happened in the absence of the 1.5 bonus point's intervention, to explain the changes in the number of admissions of women that could be directly attributable to the 1.5 bonus programme. It also noted the possible impact of the 1.5 bonus intervention in the distribution of the female student population by districts and career fields critical to the economic growth of Uganda. The epistemic advantage of Affirmative Action was measured by counting the number of public university students who were admitted to five public universalities in Uganda from specific locations (Wimmer & Schiller, 2002).

### **2.10.11 Gender in the context of the feminist knowledge base**

The concept of gender originates in feminist epistemology (Wodak & Meyer, 2009; 2016). Gender is an interdisciplinary concept (Mathieu, 1989; Delphy, 1993). Its relevance, meaning and functions are fluid and contentious depending on contexts, politics and epistemologies. In this study, it is treated and understood as an analytical socially constructed category (Nicholson, 1994; Haslanger, 2000; 2012) used to interpret a “socially constructed, culturally and historically specific” phenomenon (Hall, 1997a; 1997b: 32). As a social category, gender is heterogeneous in nature (Mikkola, 2016). Its diverse social positions determine the empowerment of some and the disempowerment of others (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66). In the governance of public university education in Uganda, the 1.5 bonus intervention programme is embedded in the discourse of gender to “help to vet the criteria of who belong and who do not” (Donzelli, 2018: 64). It is a special object of policy making that plays a regulatory role (Mezzadra & Neilson, 2013) where potential social advancement of groups may be “encouraged or discouraged” (Yuval-Davis, 1997: 12).

The study applies the Gender Parity Index (GPI) approach in Chapter Nine to assess objective five, i.e., how men and women are represented in public university education in Uganda. Objectives 5 and 6 of the study are grounded in gender, a feminist epistemology of knowledge. While objective five seeks to explore what would have happened to women’s representation in public university education in Uganda in the absence of the Affirmative Action programme, objective six analyses how men and women are represented by career fields in public university education in Uganda. In both objectives, gender is understood and treated as a social phenomenon and an analytical category (Hall, 1997a). Its meaning, function and implications in the public university educational distribution system in Uganda are conceived as varying. This is dependent on contexts (such as location and social position), politics including policies, systems and practices responsible for distribution of public university education, and epistemologies (Intemann, 2010; Stone-Mediatore, 2007; Donzelli, 2018) in different regions and districts of Uganda and in fields of study critical for equity and equality in public university education in Uganda.

Gender as a concept is understood and interpreted as socially constructed as well as culturally

and historically specific phenomenon (Hall, 1997a; 1997b: 32). Gendered subjects in public university education in Uganda are defined as men and women whose position in the admission system is marked and justified by “features” that reflect the social, cultural and historically specific aspects (Haslanger, 2012: 234) of the public university distributional policies, systems and practices. These constructs may put men and women in different social positions and determine the empowerment of some and the disempowerment of others (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66) in all aspects of public life, whether in education, health, economy, politics, jobs, employment, income or in the sharing of the benefits of land, agriculture and natural resources, among others.

It is also treated and understood as a heterogeneous category or unit of analysis with its own hierarchies, categories and intra-categories (Mikkola, 2016) each of which intersects and interacts with policies, systems and practices responsible for the distribution of public university educational opportunities in the different contexts of location, social position and established power structures. This conceptualisation offers the study a unique framework that avoids analysis that only brings into focus the marginalised or the poor among gendered groups (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66). It eliminates the temptation to focus only on the issues of the relatively well off among designated groups.

## **2.11 The inter-categorical approach of feminist theory of knowledge**

When assessing the efficacy of social programmes/policy such as Affirmative Action, the focus on causal effect alone is often of limited value. It is important to investigate when the policy does and does not work (Arellano, 2003). The inter-intra-categorical approach of the feminist theorisation allowed the study to take into account the potential heterogeneous nature of the policy environment and its possible impact on the programme to determine the different contexts in which the Affirmative Action policy worked or did not work. Accounting for these differences strengthened the degree to which results can be generalisable and the applicability of lessons learned for interventions in other contexts (Arellano, 2003).

The inter-categorical approach is based on a theory that hypothesises the potential existence of inter-group differences and inequalities among beneficiaries of the Affirmative Action

programme. The theory conceives that these differences may vary depending on particular Standpoints or social locations of epistemic agents (McCall, 2005). In this study, beneficiary district of origin, high school and public university field of study are conceptualised as particular Standpoints that may account for the potential existence of inter-group variations in the social phenomenon. The conceptualisation renders students' district of origin, high school and public university field of study as units of analysis and the theoretical framework to assess the social phenomenon through "comparative multi-group analysis" with a focus on variations "among already constituted groups" (McCall, 2005: 1784-85) and the "changing configurations of" the phenomenon "along multiple and conflicting dimensions" (McCall, 2005: 1784-85).

To take potential inter-group differences and inequalities among beneficiaries into account, the study: (1) investigated districts that benefitted and those that did not benefit from the Affirmative Action policy; (2) ascertained the subpopulations for which the policy was effective or harmful; (3) proposed recommendations to optimise the impact of the 1.5 bonus intervention policy; and (4) generalised causal effect estimates obtained from a sample of the target population to determine the difference that the bonus points made in the admission outcome for female students from 112 districts in Uganda. Districts and high schools where beneficiaries were most concentrated were identified as those where the Affirmative Action policy and programme was most effective.

The strength of this approach lies in the use of "provisional categories" as units of analysis. This is given the focus of the inter-categorical approach on structure relations, policies, systems and practices that may explain the phenomenon based on its variations among already constituted groups and their "changing configurations along multiple and conflicting dimensions" (McCall, 2005: 1784-85). The approach does not only require the study to "identify similarities or differences related to the phenomena", but also to "call attention to the complex and sometimes contradictory social, cultural and historically specific settings" (Kim-Puri, 2005: 149) of the phenomenon.

The inter-categorical approach provided the basis that made a comparison of multi-groups that constitute each category possible (McCall, 2005: 1786-87; Donzelli, 2018). The methodology focused on analysing inter- and intra-group differences (Yuval-Davis, 2011: 4; Donzelli, 2018)

among the beneficiaries of the Affirmative Action programme to expose the complexity and nuances of the phenomenon (Yuval-Davis, 2011: 7). It connects the discourses of gender, social location, social positions and epistemic advantage in ways that reveal the meaning, functions and implications of the conundrum of equity in the distribution of public university education in Uganda. It exposes the complex and sometimes-contradictory dimensions of the Affirmative Action policy across complex demographic, geographical and cultural settings (Kim-Puri, 2005: 149).

The approach hypothesises the potential existence of inter-group differences and inequalities among already constituted groups (McCall, 2005; Donzelli, 2018). It provides the framework to explore if and how the inter-group differences in the distribution of public university student population among the four regions and 112 districts of Uganda vary from one region and district of the country to another. It provides a framework for a multi-group comparative analysis of the phenomenon that allows researchers to focus on the analysis, investigation and understanding of variations in the social phenomenon among already constituted groups that make up each category. This is done in order to identify those districts with privileged or subordinate social locations and positions, with respect to the policies, systems and practices responsible for this.

## **2.12 The counterfactual theory and the challenges of incomparability**

How are men and women represented by career fields in public university education in Uganda? The study applies the Gender Parity index approach and the counterfactual design techniques respectively to assess how men and women are represented, and determine the potential impact of the Affirmative Action programme in Uganda on women's representation in public university education. The counterfactual design was applied to address research question five – the question of what would have happened to women's representation in Uganda's public university education in the absence of the Affirmative Action programme.

Coined by Goodman in 1947, the term “confounding” or “counterfactual” refers to induction reasoning. It is the ability to infer from past experience about events in the future (Goodman, 1947). In the context of objective five, the confounding effect refers to the confusion, which may arise due to the historical, cultural and social causes that may influence the social phenomenon

and account for its changing configuration and variations in regions and districts of the country. Such confounding or counterfactual effects may confuse, or stand in the way of investigation if not taken into account (Morabia, 2011). In other words, counterfactual or confounding theory brings to light the fact that there may be other causes which may have affected, confused or stood in the way of the of the phenomenon – the policies, systems and practices responsible for women’s representation in public university education in Uganda, and which need to be taken into account.

In the confounding theory, the word “confounding” means “incomparability” of two or more groups in a study. It is the formal difficulty experienced by researchers in defining conditions that make certain groups comparable and others incomparable (Greenland, Robins & Pearl, 1999). It refers to a process of counterfactual reasoning and inferences (Pearl, 2009a; 2009b; Parry, 1957; Rubin, 1974; Shpitser & Pearl, 2008) to gain control of events that happened (Nasco & Marsh, 1999; McCloy & Byrne, 2000) and avoid contradictory results (Lee, 2014; Lebow, 2000). It is finding out about things that did not happen (Thompson & Byrne, 2002).

A number of socio-economic variables could affect the outcome of the bonus intervention programme. Firstly, the demographic characteristics of the public university student population in Uganda vary by regions and districts of the country and by levels of relative ease or difficulty of access to educational resources, including access to quality schooling. These factors may affect the distribution of the benefit of the 1.5 bonus intervention points of the Affirmative Action programme when it comes to admission to a public university education. The incomparability of groups involved, if not taken into account, could compromise the degree of generalisability of the results. To address this contention, Chapter Eight of the study incorporates the demographic characteristics of student population by district of origin, district of high school and public university fields of study as key variables, as demonstrated in the inter- and intra-categorical approach, to assess the extent to which the policy intervention impacted on the distribution of public university educational opportunities and examine the extent to which Affirmative Action worked or did not work in different contexts.

With large educational gaps between districts and schools across the country, educational inequality is increasingly characterised by inequality in the distribution of resources – schools,

funding, qualified and experienced teachers, books and technologies. Students from disadvantaged schools located in poor remote districts of the country have much less access to resources. This often leads to major differences in the quality of schooling and in the distribution of public university educational opportunities. These factors could confound the cause and effect of policies such as Affirmative Action and, if not taken into account, confuse the desired aim of this assessment – to determine what would have happened to women’s representation in public university education in Uganda in the absence of the Affirmative Action programme. This is also done to analyse if and how the Affirmative Action policy increased women’s access to public university education in Uganda.

Arellano (2003) notes that, when assessing the efficacy of social programmes/policy, the focus on causal effect alone is often of limited value. It is important to investigate when the policy does and does not work (Arellano, 2003). The inter- and intra-categorical approach of feminist theorisation allowed the study to take into account the heterogeneous nature of the policy environment and its impact to determine the different contexts in which the Affirmative Action policy worked or did not work. Accounting for these differences determines the degree to which results can be generalisable and the applicability of lessons learned for interventions in other contexts (Arellano, 2003). With this in mind, the study was conceptualised to (1) investigate districts that benefitted and those that did not benefit from the Affirmative Action policy; (2) ascertain the subpopulations for which the policy was effective or harmful; (3) propose recommendations to optimise the impact of the 1.5 bonus intervention policy; and (4) generalise causal effect estimates obtained from a sample of the target population to determine the difference that the bonus points made in the admission outcome for female students from 112 districts in Uganda.

## **2.13 Conclusion**

According to the post-colonial gender theorists, the main challenge for inequality arises from marginalisation (Oyewumi, 2003; 2011) and exclusion of Africa people from all aspects of public life, including education, health, politics and the economy. The solution, according to Oyewumi (2011) lies in defending culture (the marginalised) and putting communities that suffer the brunt of this exclusion at the center of policy. It lies in erasing a colonial mentality and

culture from all aspects of public life. Oyewumi (2011) argues that equity and equality should not be defined from the perspective of gender alone. Social class, race and ethnicity should be taken into account and, in the post-colonial era, this cannot be achieved merely on the basis of gender, but also geography and demography. She warns gender experts of the risk of addressing the issues of women or women's groups who are relatively well off without including the realities of those who are oppressed or economically disadvantaged. She argues that gender analysts should account for differences between all groups in societies and that they must reflect the diverse nature of communities by acknowledging and relating gender and equity issues to all spheres of influence within society, including education, health, politics and the economy. Like other postcolonial gender theorists, Oyewumi (2003; 2005) is concerned with the need to focus our analysis on a much wider viewpoint of the complex layers of exclusion that exist within any given society. In support of this view, Lugones raises the need for experts to look at the gendered history of colonialism and how it is perpetuated in the development status of the marginalised (Lugones, 2010). In other words, the challenges of gender in education and any other spheres of development need to be deconstructed from the viewpoint of marginalisation and the structures of colonialism that continue to be perpetuated within societies of today.

The next chapter presents the research methodology. It constructs the meaning frames behind the tools and techniques used for data collection, analysis and interpretation. Based on the feminist epistemology of Gender and Standpoint theories, the chapter defines the study's units of analysis. It describes the sampling plan and translates the theoretical elements of the study into specific methods and tools of which data collection, analysis and interpretation was undertaken.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Overview of research methodology**

This study is grounded on three feminist epistemologies. These include Gender (Hall, 1997a; Nicholson, 1994; Haslanger, 2012; Mathieu, 1989; Delphy, 1993; Mathieu, 1989; Delphy, 1993), the Standpoint theory (Intemann, 2010; Mamo, 2005) and the inter-categorical approach of the feminist theorisation (McCall, 2005: 1784-85). The design builds on the feminist Standpoint concept of ‘social location’. It explores the theoretical role, meaning and functions of the concept of ‘social location’ on the discourse of equity in higher education. The concept of social location depicts the significance of the potential role that the location of the student’s district of origin and student’s high school may play in shaping and limiting access to public university educational opportunities. This is in the context of the population quota based practices, the national merit system and the Affirmative Action policy responsible for the distribution of education in Uganda. It was used to explore the degree of relative ease or difficulty in access to public university educational opportunities from one district of the country to another. It focuses on comparative multi-group analyses and investigation of the social phenomenon of inequality in public university education among already constituted groups (Jayadev & Reddy, 2011) of districts in different locations and draws attention to those in privileged and those in subordinate positions in the context of the public university educational distribution system. The concept of social location was derived from Intemann (2010) and Mamo (2005). It can also be located in Wimmer & Schiller (2002), Denis, (2008), Mikkola (2016), Millán (2016), Mathieu (1989) and Delphy (1993). Based on the concept of social location, the Fair Share Equity Framework was designed and customized to explore the intersectionality and interdisciplinary nature of the concept of gender and its interdependency with the concept of social location and social position. The purpose was to develop a comprehensive framework, to examine how policies, systems and practices, which do not take this intersectionality into account, may produce, reproduce, naturalise and legitimise inequality in everyday life (McCall, 2005; Haslanger; Millán, 2016).

To achieve this level of complexity and sophistication of the investigation, the study combines

quantitative and qualitative designs (Clandinin, 2006; Kitzinger, 1994; Fern, 1982; Yanow & Schwartz-Shea, 2015) to address the complexity of the analysis and investigation involved in answering the following research questions: (a) What policies, systems and practices are responsible for the distribution of public university education in Uganda? (b) How does the population quota, district of student origin and high school of qualification influence the distribution of public university educational opportunities in Uganda? (c) What would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme? (d) How is the social phenomenon of gender inequality manifest in the distribution of public university educational opportunities in colleges and fields of study?

To address these questions, the study design follows three main stages, all of which were grounded on the feminist Standpoint empiricism, particularly on the concepts of social location and social position, as theorized in feminist epistemology articulated by Mamo (2005) and Intemann, (2010). The Fair Share Equity Framework, which defines the quantitative and qualitative aspects of the study is, based on the feminist Standpoint empiricist notion that “*one's social location affords him or her multifaceted access to social phenomenon*” (Mamo, 2005: 358) and that “[*s*]ocial location systematically shapes and limits knowledge production and access to resources from a particular Standpoint” (Intemann, 2010: 783). This is as far as access to public university educational opportunities as a resource in regions and districts of Uganda is concerned. Through both quantitative and qualitative methods and techniques, the study sought establish the extent to which location affords “*multifaceted access*” (Mamo, 2005: 358) to higher education in Uganda to students depending on their districts of origin, district of high school location, gender and Affirmative Action. It sought to test the application of the feminist Standpoint theory in the field of higher education, to demonstrate if and how policies, systems and practices responsible for the distribution of public university educational opportunities take ‘location’ factors into account and how this may “*systematically shape and limit access to*” *public university education as a “resource” in regions and district of Uganda “from a particular Standpoint*” (Intemann, 2010: 783). The Equity Framework of analysis demonstrated a clear link between location and access to public university educational opportunities. It provided empirical proof of the significance of the feminist Standpoint empiricist's theory to the topic, more so, the

reality that social location provided epistemic advantage that was specific to the location of the epistemic agents (Intemann, 2010) in as far as access to public university education as a resource in regions and districts of Uganda was concerned.

In the first stage of the research process, a comprehensive desktop review and documentary analysis was, undertaken. This was to address the first research question; in other words, assess the policies, systems and practices responsible for the distribution of education in Uganda and examine their meaning, functions and implications on the social phenomenon of inequality in the distribution of public university educational opportunities in regions and districts of Uganda. Following the desktop review and documentary analysis, a quantitative design was, used in the second stage of the research process. An extensive electronic search was, launched, to identify relevant data sources on public university enrolment and district population distribution in the country. The purpose of the electronic search was to collect quantitative data on the distribution of the student population in the country to; address the question of if and how district population quota, district of student origin, high school of qualification, gender and Affirmative Action influence the distribution system of public university education in Uganda. From the public university databases and other national sources, a fixed sample of 101.504, students admitted by five public universities, in 158 fields of study in 10 public university colleges, from 2009 to 2017 and from 112 districts of Uganda was generated. As clearly evident in the results of the study, the record of each of the above student sample was, meticulously analysed electronically and used extensively as a quantitative source of information and knowledge to address four-research questions. Finally, a qualitative design (see Clandinin, 2006) was used in the third and last stage of the research process, to collect and analyse qualitative data based on common themes or concepts to triangulate what was collected from quantitative sources, in stage one and two of the research process. In this stage semi-structured interviews and Focus Group Discussions-FGDs (Fern, 1982) were deployed to capture personal experiences and voices of key informants (Kitzinger, 1994). The intercategory approach of the feminist theorisation (McCall, 2005) was used in the study design; to grounded analysis on the ‘district’, ‘high school’, ‘gender’, and ‘Affirmative Action’ as a “provisional categories” (McCall, 2005: 1786-87) or units of investigation, each in itself and on its own; and to the significance of the feminists Standpoint theory that each of these categories serves as a “*particular Standpoint*” (Intemann, 2010: 783) in

access to resources such as public university educational opportunities. In the light of the feminist Standpoint theory above, the concept of Fair Share, fair Share Index, Equity Index, Equity Distance and equity distance index to education was innovated to measure the feminist discourse of social location. This was, to assess the potential role that each of the 112 districts and 1.178 high schools of Uganda played as a particular ‘Standpoint’ in access to public university educational opportunities in the country.

In the methodology, districts and high schools were, ranked, in the order of their public university student population. Based on the ranking exercise, each district and high school was, assigned a rank or score to determine its social location and social position, in the public university educational distribution system. The rank was a measure of how significant the district or high school was, in the context of the public university educational distribution system. It was a way to illustrate how the notion of social location and social position embedded in the feminist Standpoint empiricism is practically brought to light. According to the Feminist Standpoint theory, access to resources such as higher educational opportunities is “grounded in historical socio-economic context and varies according to “particular Standpoints” (Mamo, 2005: 358). In the Standpoint Theory, location matters as a factor in knowledge production and access to resources. The design of the study embedded the notion of social location and demonstrated that location offered the benefit of access to public university educational opportunities as a resource to epistemic groups or students in particular locations. Some particular locations were found, to have facilitated some, while other locations inhibited or limited access for others. It demonstrated that the benefit of access is indeed, grounded in location as theorised, according to Mamo (2005) and Intemann (2010). The following sections of this chapter provides a brief description of the study’s units of analysis and samples; the research techniques and methods used for data collection; the inter-categorical approach and counterfactual techniques used in the analysis of data, interpretation and presentation of results.

### **3.2 Units of analysis**

A statistical sample of 101 504 students, from five public universities was used as the main source of knowledge in the study. The sample was categorised and investigated under six units of analysis. These include: (a) population quota of the districts involved; (b) district of students’

origin; (c) students' high schools; (d) public university field of study; (e) gender; and (f) beneficiaries versus non-beneficiaries of Affirmative Action programme. Based on the Feminist Standpoint Theory, each of the six units of analysis is conceptualised as a "Standpoint" for access to the social phenomenon. In the context of the Standpoint Theory, each of the six units represents different "Standpoints" which "*systematically shape and limit knowledge production and access to resources*" (Intemann, 2010: 783; Mamo, 2005: 358). Under the inter-categorical approach (McCall, 2005), these Standpoints are treated as provisional (fixed) categories of analysis, "grounded in historical socio-economic context" (Mamo, 2005: 358) of the policies and systems responsible for the distribution of public university education in Uganda. Each sets the basis upon which the study assesses "variations among already constituted groups in each location and identifies the changing configurations of the phenomenon along multiple and conflicting dimensions" (McCall, 2005: 1784-85) as listed above.

The six units of analysis make "comparative multi-group studies" (McCall, 2005: 1784-85) possible. Although imperfect as it may be, each provides a framework, which simplifies the complexity involved in investigation and comparison of multiple-groups that constitute each category of analysis (McCall, 2005: 1786-87; Donzelli, 2018). This contributes to the expansion of the Standpoint epistemology and approach to knowledge. It enhances the understanding of the social phenomenon of inequality in public university educational distribution in Uganda. The inter-categorical approach provides a framework, which clarifies "how members of the group may be socially positioned differently and what physical markers serve as a basis of their treatment" (Haslanger & Haslanger, 2012: 251). It recognises the significance of structural and differential inequalities to the individual parts, to avoid homogenisation and generalisation that goes with territory of classification and categorisation (Denis, 2008). The six units of analysis focus the study on the process by which inequalities may be "produced, experienced, reproduced and resisted in everyday life" (McCall, 2005: 1782-83; Donzelli, 2018: 62).

### **3.3 Research techniques**

#### **3.3.1 Objective 1: Desktop reviews and document analysis**

An extensive desktop review and document analysis of the regulatory and policy framework was undertaken. This was the framework, which governs the distribution of education in Uganda. The objective was to assess the meaning, functions and implications of the policies, systems and practices responsible for the distribution of public university education in Uganda. The review covered a number of international treaties to which Uganda has committed and the regulatory as well as the policy provisions put in place to fulfill its commitments under international law. Follow up interviews and discussions were held to assess the policy environment and underscore its implications for equity and equality in the distribution of public university educational opportunities. Table 4.1 in the appendix provides an overview of the key policy and legislative documents reviewed. It takes into account the history of Uganda's regulatory and policy framework for education that evolved over the years.

#### **3.3.2 Objective 2: The Fair Share Equity Framework of analysis**

In the context of the Standpoint Theory, the district population quota was, conceived, as a “particular Standpoint” for resource allocation and for access to resources. Through the population quota-based policy, systems and practices of educational distribution in Uganda, access to public university education was conceptualised as “grounded in historical socio-economic context” of the population of each district (Mamo, 2005: 358). This conceptualisation provides for the use of the population quota as a unit of analysis. It informed the development of the concepts of Fair Share and Fair Share Index, as well as the application of the concept of Fair Share Gap or Equity gap in education, as used in the Fair Share Equity Framework of analysis, to respond to objective two of the study. The use of the population quota as a unit of analysis also provided a foundation which made the assessment of the phenomenon possible from multiple, conflicting and changing dimensions involving 112 districts of Uganda, using the national population figures of 2006 and the public university student population from 2009-2017 as the main sources of knowledge.

A sample of 101 504 students from the population enrolled in five public universities in Uganda

from 2009 to 2018 and from 112 districts of Uganda and the 2006 population figures of Uganda were used as the main sources of knowledge. This was done to identify the potential role and functions performed by population quota in the policies and systems responsible for the distribution of public university education in Uganda, and to explore how the distribution of public university student population may vary, depending on variations in population quota from one region and district of the country to another. The chapter assesses if and how the distribution patterns shift depending on population quota in response to the population quota-based modes of governance.

The Fair Share Equity Framework of analysis refers to a comprehensive set of tools that entails the application of six equity concepts of Fair Share, Fair Share Index, Equity Index, Equity Gap, Equity Classification and Equity Distance. To comprehend the phenomenon of inequality in the distribution of public university education, the Fair Share Equity Framework involves five stages of analysis and investigation: (a) the computation of the Fair Share Index (FSI); (b) an assessment of the actual proportions of public university student population allocated; (c) an analysis of the Fair Share Gap or Equity Index in public university education by region and district of the country; (d) establishment of the Equity Index of districts in public university education; and (e) the categorisation of districts into equity categories.

### ***3.3.2.1 Fair Share Index (FSI) of public university education***

As a proxy for equity, the purpose of the Fair Share Index is to explore if and how the distribution of public university student population varies, depending on the changing configuration of population quota from one region and district of the country to another. This is done in response to the modes of governance used or policies and systems responsible for its distribution in regions and districts of the country. In the application of the Fair Share Equity Framework, the Fair Share Index (FSI) of the 4 regions and 112 districts of Uganda are established, as a first step. The index is calculated based on 2006 population figures as a base year. It is calculated as the percentage proportion of the district population figure to the overall population of the country in a given year. For example, if the population of district X is 1 200 000 out of the overall country population of 12 000 000 people, the population quota or the Fair Share Index for public university education of district X would be 10 per cent. It is the

actual percentage representation of the district population to the overall population of the country in a given year.

### ***3.3.2.2 Proportions of public university student population by regions and districts***

Step two in the Fair Share Equity Framework involves an assessment of the actual proportions of public university student population allocated to each of the 112 districts of Uganda over the period 2009 to 2017. In the assessment of actual allocation to districts, a sample of 101 504 students enrolled in five public universities in Uganda from 2009 to 2018 and from 112 districts of Uganda was analysed by district. The percentage of the actual allocation to the over sample was determined by district. The student admission data was the main source of knowledge used to assess the potential role and functions performed by each district, in the context of the policies and systems responsible for the distribution of public university education in Uganda. It was also used to explore if and how the distribution patterns shift depending on the location of district in response to the significance of the feminist concept of social location and its relevance in public university educational distribution policies, systems and practices of governance. The theoretical significance of assessing the actual proportions of public university student population allocated by region and district is to establish an Equity Index and identify the Fair Share Gap in public university education by region and district of Uganda. In other words, it will be used to assess the difference between population quota and the actual proportions of public university student population allocated to each of the 4 regions and 112 districts of Uganda over the period 2009 to 2017. The significance of this assessment is also located in Chapter 6, where the index is used to examine if and how students' region and district of origin matters in Uganda's public university educational distribution system.

### ***3.3.2.3 The Fair Share/Equity Gap of public university education***

When the Fair Share Index is contrasted and compared with the actual percentage of the public university student population allocated to the district, the difference between the two indices reveals the Fair Share Gap. This is the degree to which the actual proportion of the distribution of public university student population in a district is reasonable, relative to the district's population quota or the actual percentage of the district population in a given year. The difference between

Equity Index and the actual percentage of the public university student population allocated to the district accounts for the Fair Share Gap (FSG) in public university education among regions and districts.

In step three, the Fair Share Gap or Equity Index in public university education is assessed by region and district of the country. In other words, the difference between population quota in and the actual proportions of public university student population allocated over the period 2009 to 2017 was assessed for each of the 4 regions and 112 districts of Uganda. For instance, if the national rank A and regional rank B of district, X in public university student population was 98 and 36 respectively; the Equity Distance of district X in public university education would be 62. This represents the difference between the national and regional ranks in student population. Fair Share Gap (FSG) is calculated as the difference between the district's Fair Share Index and the actual percentage of the district public university student population allocated to the district. It represents the proportion of resource allocation or public university student population for which each district of the country is entitled, if the allocation of the student population or any national resource was based on the population quota policy and system of governance. It constitutes an appropriate Fair Share of resources, or public university student population, for each district to achieve equity in distribution of public university educational opportunities under the population quota-based policy and systems of governance.

The Equity Index refers to the difference between the district's population quota or FSI and the actual proportion of public university student population allocated. It measures the Fair Share Gap – the public university educational gaps from one region and district of the country to another, relative to the degree of variations between the population quota and the actual proportion of public university student population allocated. It illustrates the percentage of the gains or losses in the public student population or in resource allocation incurred by a district over time, owing to the difference between the district's population quota and the actual proportion of public university student population allocated. It is a measure of inequality in distribution of public university educational opportunities as a resource in regions and districts of the country, based on the population quota-based policies and systems of governance responsible for its distribution. The Fair Share Gap (FSG) of public university education represents the

Equity Gap in public university education in a district. It represents the percentage of public university educational opportunities forgone, as a result of the gap or difference between the population quota and the actual proportion of the total public university student population allocated to the district.

#### ***3.3.2.4 The Social Equity Index of districts in public university education***

In step four, the Cumulative Equity Index/Gap and Average Equity Index/Gap (CEI and AEI) in public university education is established by district to illustrate the meaning, function and implications of the Equity Gap. This is the difference between the population quota and the actual proportions of resource allocation on the distribution policies, systems and practices of public university educational opportunities in regions and districts of the country. The Cumulative Equity Index (CEI) estimates the total number of student uptake opportunities gained or lost in public university educational opportunities by a district over the eight-year period. It refers to the total share of uptake in the student population to which a district would be have been entitled over the eight-year period, if student allocation was to be based on a population quota distribution system in which the number of positions assigned to a district was proportional to its population quota.

The Average Equity Index (AEI) expresses the number of missed opportunities for public university education by a district per annum. It is estimated as  $CEI/100 \times \text{Total student population}$ . It represents the total number of missed public university educational opportunities by district per annum. AEI is expressed either in relative, negative or positive percentage terms. It measures if and how epistemic advantages in the distribution of public university educational opportunities exist in the district. The higher the AEI, the more excluded the district from Public University Education or from the distribution of the resource in question.

#### ***3.3.2.5 The Social Equity categories of districts in public university education***

In step, five, three “equity categories” of districts were established to cluster districts in equity categories, using an Equity Regulator (ER). The Equity Regulator is a measure or social indicator, which defines the lowest and the upper most limits (points) in the range of AEI for each of the three equity categories of districts. The equity regulator defines the minimum and

maximum range in the values of AEI that qualify a district to be placed in any one of the three mutually exclusive categories (positive, negative, and relative equity). It sets the minimum and the maximum range of the AEI that a district must fall within, to be classified in a given equity category.

Based on the values of Average Equity opportunities, districts are classified into three equity categories, positive, negative and relative equity categories. The Positive Equity category (PEC) entails districts whose Average Equity Index (AEI) values or fair share advantage was positive. Negative Equity Category (NEC) refers to districts whose AEI or Fair Share Gaps were negative. These were districts whose proportions of the public university student population exceeded their Fair Share Index or population quota. The third equity category was the Relative Equity Category (REC). This was used to classify districts that fell within an acceptable range of AEI.

### **3.3.3 Objective 3: The Location Factor – The Equity Distance approach**

#### ***3.3.3.1 Equity Distance approach***

To assess if and how students' district of origin matters in Uganda's public university educational distribution system, the concept of Equity Distance (ED) was devised to examine any potential benefits to epistemic groups that are specific to the theoretical significance of the meaning of the feminist Standpoint Theory. The purpose of the Equity Distance approach was to theorise potential variations in social phenomena among multiple groups of districts involved in the study and possible limitations rendered in specific locations, or regions and districts of Uganda.

The Equity Distance (ED) to public university educational opportunities estimates the social positions of districts to public university education in the context of the policies, systems and practices responsible for the distribution of public university educational opportunities in regions and districts of Uganda. It measures the degree of relative ease or difficulty of access to public university educational opportunities from different districts of Uganda based on the feminist discourse of social location of the Standpoint Theory. To determine the Equity Distance of districts to public university educational opportunities, a national and regional ranking of districts by their public university student population was carried out. The Equity Distance (ED)

was estimated as the difference between national rank A and regional rank B in public university student population for each of the 112 districts of Uganda. For instance, if the national rank A and regional rank B of district, X in public university student population was 98 and 36 respectively; the Equity Distance of district X in public university education would be 62. This represents is the differences between national and regional ranks in student population.

### ***3.3.3.2 Classification of districts into equity categories***

To cluster districts based on social distance/equity, ED of each district was translated into a National Equity Index (NEI), a numerical value that represents the social location of one district of the country compared to another to make multiple group comparisons possible. NEI is estimated as the quotient of the difference between national and regional ranks in student population in each district. For example, if the national rank A and regional rank B of district X in public university student population was 100 and 40 respectively, the national Equity Index of district X in public university education would be 0.6. This represents the quotient of differences between national and regional ranks in student population  $(100-40/100)$ . It illustrates the variations in Equity Distance or social position in the public university educational distribution system from one district to another.

### **3.3.4 Objective 4: The high schools factor**

To examine if and how students' high school matters in Uganda's public university educational distribution system, the feminist theory of social position was used to conceive the potential benefits high school provides to epistemic groups that are specific to its social position. A sample of 101 504 students enrolled in five public universities from 2009 to 2018 and from 112 districts of Uganda was used as the main source of knowledge to assess the role and functions performed by high school as a factor of social position in the policies and systems responsible for the distribution of public university education in Uganda. The purpose of the high school, as a unit of analysis, was to explore if and how the distribution patterns shift depending on the high school in response to the significance of the feminist discourse's social position in public university educational distribution policies, systems and practices of governance. Up to 1 178 secondary schools accounted for the student population of 101 504. The distribution of public university

student population was analysed by the number of high schools that accounted for the public university student population from 2009 to 2017.

Following this analysis, the distribution of the high schools in Uganda was analysed by region and district. The proportions of the student population qualifying from the high schools located within each region was established and compared with the proportions of the location of the top 100 secondary schools of qualification in the region. This was to determine the potential extent to which access to the top high schools influenced the public university educational distribution system. To determine the social position of each of the 1 178 secondary schools that accounted for the student population of 101 504 from 112 districts of Uganda, each school was ranked in the order of its student population to identify the potential existence of inter-group differences and inequalities in the student population among high schools. The rank of each secondary school was obtained by the number of public university student population admitted to public universities from 2009 to 2017.

A multi-group comparative analysis of the phenomenon, involving 112 districts is undertaken to examine the potential existence of inter-group differences and inequalities between 1 178 secondary schools that accounted for the student population of 101 504 involved in this study. The comparative multi-group analyses focus on understanding variations in the social phenomena among already constituted groups of schools that constitute each category, to identify those schools in privileged and those in subordinate social locations and positions.

The methodology is based on the feminist Standpoint Theory (Mamo, 2005: 358). As Intemann (2010: 783) observed, “*social location systematically shapes and limits knowledge production and access to resources from a particular Standpoint*”. The study conceives the location of the student’s high school as “a particular Standpoint” which, according to Intemann (2010: 783) “systematically shapes and limits knowledge production and access” to social phenomena. The Standpoint Theory provides for the potential existence of an epistemic advantage that is specific to the students and high schools, which may vary according to the specific context of the high school. This epistemic advantage is “grounded in historical socio-economic context of that particular high school” (Mamo, 2005: 358), and in the context of the public university educational distribution policies, systems and practices of governance.

The high school provides a unit of analysis that allows the study to examine the phenomenon from multiple and conflicting dimensions of the concept of social position, providing opportunity to assess the potential existence of inter-group differences and inequalities, based on high schools located in the four regions and 112 districts of the country (McCall, 2005). It provides the basis for comparative multiple group analyses of the phenomenon to assess if and how social position matters among multiple regions, districts, high schools and fields of study in the context of Uganda's public university educational distribution policies, systems and practices.

Each high school is understood and treated as a category and unit of analysis. In Chapter Seven, the study examines if and how the distribution pattern of public university student population may vary from one region and district to another depending on the contribution of the high school factor and the extent to which this may be "grounded in historical socio-economic context" (Mamo, 2005: 358). It is treated and understood as a unit of analysis whose potential impact on the social phenomenon varies according to location. This allows the study to examine what inter-group differences and inequalities exist, if any, to explore possible reasons for variations and the changing configurations in the social phenomenon in the 4 regions and 112 districts of Uganda (McCall, 2005).

The distribution of students in high schools – whether public or private – is an important governance issue in the distribution of quality education. Districts where the top secondary schools are concentrated are often those in which levels of relative ease of access to a public university educational opportunity is highest. The top secondary schools often produce the best students in exams. Entry into them may be considered the prequalification in the individual merit system of Uganda, which accounts for 75 per cent of all government sponsored public university educational opportunities. This may imply that the distribution of public university opportunities depends on the social position of the students' high schools.

The inter-categorical approach of the feminist epistemology (McCall, 2005: 1786-87; Donzelli 2018) was used to explore if and how the distribution of public university student population may vary, depending on the location and social position of high schools from one region and district to another. Since the 2005/2006 academic year, 75 per cent of the 4 000 government sponsored public university educational opportunities available each year were distributed

through the national merit system. The best 3 000 students, with the highest combination of Advanced (A level) and Ordinary (O level) results are selected for academic programmes identified as critical areas for national development. While 75 per cent of positions are allocated through the national merit system, 25 per cent (approximately 1 000 positions) are assigned through a district quota system. In the eligibility criteria, all subjects taken by a student at Advanced Level of secondary education are grouped in three categories – essential, relevant and desirable. Subjects are given weights according to their category for purposes of admission to any undergraduate programme. Admission is largely assigned according to the philosophy of national merit. In filling undergraduate programmes, preference is given to the top candidates in national examinations regardless of the “historical socio-economic context” or “social location, social position and particular Standpoints” (Mamo, 2005: 358) in which these results may be grounded and interpreted.

### **3.3.5 Objectives 5 and 6: Gender and Affirmative Action**

To assess the question of how men and women are represented in public university career fields critical to the economic growth and development of Uganda, the percentage of men and women who were admitted to five public universities from 2009 to 2017 was established. This was from a public university student population of 101 504 over the eight-year period and analysed by district of origin, public university college and field of study. The variations in levels of representation were assessed from one district, public university college and field of study to another, using the Gender Parity Index (GPI) method. GPI was estimated as the quotient of the number of females by the number of males enrolled in a given academic year (Charu & Narayan, 2018). It is the value of the female public university student population divided by that of the male. Whereas a GPI value of less than one indicates differences in favour of boys, a value near one indicates that parity has been more or less achieved (UNESCO, 2012). The GPI approach was adapted to advance an understanding of the extent of inequality in the distribution of educational opportunities as a resource in districts of the country and in different fields of study critical to economic growth and development. It was also used a method to account for what would have happened to women in higher education in the absence of the 1.5 bonus point intervention, through an analysis of the changes that took place in the number of women

admitted over eight academic years and which could be directly attributable to the 1.5 bonus programme. It highlighted the impact of the 1.5 bonus intervention policy in districts of Uganda and in 158 career fields.

The impact of Affirmative Action was measured by counting the number of female students that was admitted to five public universities in Uganda from specific locations (Wimmer & Schiller, 2002). The study took the impact of the 1.5 bonus intervention points into account, by isolating the difference between the required cutoff points (X) for admission to each of the 158 fields of study and the actual weight (Y) obtained by each applicants. If the difference between X and Y was equal or greater than 1.5, then the counterfactual effect or epistemic advantage of the policy was considered not significant. It meant that the student would have been admitted to the academic programme regardless of the 1.5 bonus intervention points. If the difference was less than 1.5, then the effect of the bonus point was found to be significant. It meant that the student would not have been enrolled in the academic programme, in the absence of the 1.5 bonus intervention.

### ***3.3.5.1 The inter-categorical approach of feminist theory of knowledge***

The inter-intra-categorical approach (Meekosha, 2006) was applied to take into account the potential heterogeneous nature of the policy environment in which the Affirmative Action programme was implemented and its possible impact on the public university student population. It was vital to assess the different contexts in which the Affirmative Action policy worked or did not work. Accounting for these differences would strengthen the degree to which results can be generalisable and the applicability of lessons learned for interventions in other contexts (Arellano, 2003).

The beneficiary's district of origin, high school and public university field of study were used as the units of analysis to account for potential differences in the meaning, functions and implications of Affirmative Action in the social phenomenon. Three provisional categories of analysis were used to establish what would have happened to women's representation in public university education in Uganda in the absence of the Affirmative Action programme: (a) students' high school; (b) district of origin; and (c) public university field of study. Table 3.1

below shows each of the three provisional categories (inter-categories) involved in the analysis, with their respective number of intra-categories of analysis used:

**Table 3.1: Provisional categories used in the analysis of Affirmative Action programme**

<b>Provisional Category of Beneficiaries of Affirmative Action</b>	<b>Number of intra-categories involved</b>
District of origin	112
Students' High school	1 178
Students' Public University field of study	158

As illustrated in Table 3.1, a large number of intra-categories were involved in the analysis of each of the three intra-categories. To take potential inter-group differences and inequalities among beneficiaries into account, districts and high schools where beneficiaries were most concentrated were identified. These were classified as districts where the Affirmative Action policy and programme was most effective. The inter- and intra-categorical approach drew attention of the study to both similarities and differences related to the phenomena based on the complex and sometimes contradictory nature of the social, cultural and historically specific settings in which the policy was implemented.

To assess the question of how men and women were represented by public university career fields critical to economic growth and development of Uganda, the percentage of men and women who were admitted to five public universities, from 2009 to 2017, was established. This was based on the public university student population of 101 504, admitted over the eight-year period. This was analysed by district of origin, public university college and field of study. The variations in levels of representation were assessed from one district, public university college and field of study to another, using the Gender Parity Index (GPI) method. GPI was estimated as the quotient of the number of females by the number of males enrolled in a given academic year. It is the value of the female public university student population divided by that of male. Whereas a GPI value of less than one indicates differences in favour of boys, a value near one indicates that parity has been more or less achieved. The GPI method was adapted to advance an understanding of inequality in the distribution of educational opportunities as a resource. This was done through the measurement of gender parity ratios to determine levels of gender inequality in the distribution of public university educational opportunities in the different fields

of study. It included the influence of the distribution system and policy of public university education in public university educational marginalisation.

### **3.4 Sampling procedure and validity of research design**

No sampling procedure was required as a fixed population size was used. The entire student population of 101 504, enrolled in five public universities over the eight-year period was analysed. The application of the fixed population size eliminated potential random errors in the study as all public university students from five public universities and from eight academic years (between 2009 and 2017/20) were included. The public university admission list, published by the Uganda Public University Joint Admission Board (PUJAB) was used as the source of data. This was compiled manually and then entered and analysed electronically, based on the six provisional categories or units of analysis. Due to data paucity and institutional challenges of data management, it took 14 months for the researcher to locate, gather, compile and collate eight years of student data before any analysis could begin. The use of the fixed population size meant that the ‘sample’ was fully representative of the population as the risk of sampling bias was eliminated. Sampling bias refers to a systematic error, often associated with a non-random sample of a population, which may make some members of the population less likely to be included than others, and potentially result in a biased sample of a population in which all participants are not objectively represented. The application of provisional categories as units of analysis also eliminated any potential distortions of analysis, ensuring the conclusions of the study are accurate. While eliminating sampling bias, the inter-categorical approach which was used, strengthened the external validity (the ability of results to be generalisable) and the internal validity of the study by eliminating the selection risks that occur when researchers focus on more able or organised groups, more likely to have better outcomes of interest, and participate in these kinds of studies (Arellano, 2003).

## **3.5 Data collection**

### **3.5.1 Semi-structured interviews**

Key informant were identified purposively, contacted formally and provided with disclosure letter and informed consent form through email. This was done in preparation for data collection. Each respondent invited had to express interest in participating in the study by completing and returning the informed consent form within ten working days. Twelve semi-structured interviews were conducted with 12 key informants. During interviews, perceptions, challenges and recommendations were captured based on personal experiences. Seven of the key informants were female and five male. In terms of their background two were national level government officials; two from Non Governmental Organizations (NGOs); two from the private sector (private school system); 2 were local community leaders; two were head teachers and two student leaders. Each of them was selected on the basis of their knowledge, experience and expertise on the subject. In-depth interviews were based on topics and questions designed to seek participants' opinions on different research themes and questions. A number of steps were taken at the onset of the interview process. These included seeking permission for note taking before the commencement of the interview process and starting the actual interview sessions with background questions to build rapport and put respondents at ease. Throughout the interview process, body language was observed and captured. This included paying attention to nonverbal communication styles including gestures such as smiles, seating position, body posture and eye contact. Questions asked were broad in nature and open-ended. At the end of each interview, interview notes were checked to ensure completeness and summarise immediate impressions (Odaga, 2015).

### **3.5.2 Focus group discussions**

Four Focus Group Discussions (FGDs) were held with a total of 28 participants, 13 males and 15 females. Table 3.1.0 below provides a detail summary of the composition of groups, number of participants involved in each and the common themes that emerged from the discussions:

**Table 3.1.0: Summary of Focus Groups Discussions**

Group	Composition	Summary of Emerging themes
<b>Group 1: 7 Students (Male)</b>	1 participant each from Engineering, Medicine, Education, Computer Science, Business Management and Humanities	Affirmative Action, Science based programmes, poverty, dropout, High school
<b>Group 2: 7 Students (Female)</b>	1 participant each from Education, Computer Science, Engineering, Medicine, Business Management and Humanities	Gender gap, district quota system, national merit system, Affirmative Action, High school, Science based programmes, poverty, dropout, pregnancies,
<b>Group 3: 8 Women</b>	Two district level government officials, a policy maker, a teacher, a Law Maker, an accountant, a lawyer, a Sociologist	Gender gap, district quota system, national merit system, Universal primary education, Universal secondary education, lack of quality education
<b>Group 4: 6 Men</b>	Two district level government officials, 2 high school teachers, 2 primary school teachers	Parental attitude, parental education, government policy, admission system, disadvantaged areas, competition, gender disparities, gender bias

All FGDs were conducted based on well-established standards and procedures (Fern, 1982; Kitzinger, 1994) to ensure personal experiences and voices of key informants were captured. Questions were brief and open ended, engaging and exploratory. As table 3.1.0 above shows, there were 6-7 respondents in each Focus Group. Members of each focus group were key individuals who were purposively identified, accepted to volunteer to be part of the study, and

had knowledge on the subject. Participants expressed availability for discussions and willingness to share their opinions and listen to others during the FGDs. The size of the FGDs was important to maximise participants' involvement, ideas and experiences. Each FGD was concluded at a point of saturation – in which no participant had any more new ideas to contribute. All FGDs were conducted in an open, transparent and flexible environment. From the onset, participants were assured of the right to opt out at any point, should they wished to do so. Attention was paid to ensure that every participant was actively engaged throughout the process. This was partly achieved by ensuring that the number of participants in each group was appropriate. As a facilitator and moderator, the researcher endeavored to focus participants' responses on the core issues of the study and to complete and conclude all discussions within a maximum of 90 minutes (Odaga, 2015).

### **3.5.3 Permission for the study**

Following the completion of the ethical clearance from the University of South Africa (UNISA), permission was sought from the relevant local authorities to undertake the study. Discussions were held at different levels to explain the aim and objectives of the study, identify data sources, and agree on a suitable data collection schedule, taking into account the timing of activities and availability of those involved.

## **3.6 Conclusions**

Chapter Three captures methods and techniques in the context of the Standpoint and Gender Theories (Mamo, 2005: 358). The chapter conceptualises district population quota, district of students' origin, high school of qualification, gender and Affirmative Action as key equity "Standpoints" or provisional categories for access to social phenomena. These Standpoints or categories provide the basis for comparative multiple group analyses of the phenomenon in the four regions, 112 districts, 158 public university fields of study and 1 178 secondary schools involved in this study. Based on these units, the study assessed if and how each of these Standpoints matters in Uganda's public university educational distribution system and the potential benefits it may provide to epistemic groups that are specific in the context of the distribution policies and systems for public university education in Uganda. The approach

followed in this study brings inequalities between and within groups to focus (Yuval-Davis, 2011: 4). It draws attention to districts and high schools in privileged and subordinate positions (Donzelli, 2018) as far as the distribution policies, systems and practices responsible for the distribution of public university educational opportunities are concerned. It reveals potential variations and changing configurations in the social phenomena from one region and district to another. It focuses analysis on potential epistemic advantages or benefits that the six units of analysis may provide to epistemic groups that are specific to the different contexts in which the distribution policies, systems and practices responsible for the distribution of public university educational opportunities in Uganda are implemented.

In the next chapter, the study reviews the policies and systems responsible for the distribution of education in Uganda. It examines the question of “what policies and systems are responsible for the distribution of public university educational opportunities in Uganda?” The chapter highlights the major global discursive and material discourses on education that have shaped the policies and systems responsible for the distribution of public university educational opportunities in Uganda since 1973. The first part of the chapter deals with two global discursive and material discourses on education that emerged in the 90s. In the second part, Chapter 4 reviews the policies, systems and practices that govern the distribution of public university education in Uganda that have evolved since 1973.

# **CHAPTER FOUR**

## **RESULTS**

### **THE GOVERNANCE OF EDUCATION**

#### **4.1 Introduction**

Chapter four deals with research question one: What policies and systems are responsible for the distribution of public university educational opportunities in Uganda? The chapter begins with a review of the major global discursive trajectories on education that inform the nature and substance of the policies and systems put in place to govern the distribution of public university educational opportunities in Uganda. The first part of the chapter encapsulates the two discursive and material discourses on education that emerged in the 1990s, which shaped the notion of the new global governance agenda for education. In the second part, Chapter 4 reviews the national policies, systems and practices that govern the distribution of public university education in Uganda, in particular, how Uganda's policy and legislative framework on education has evolved since 1973.

#### **4.2 The new global governance agenda for education**

The governance of the distribution of public university education is an important subject of many national debates in developing countries and a vital concern for many as the distribution of education is a fundamental concept for welfare consideration and development. This is no less the case in sub-Saharan Africa, where less than six per cent of the population has access to higher educational opportunities. The two most prominent discursive and material discourses on education that emerged in the 1990s were education as a human right under the 2000 Millennium Development Goals (MDGs) and education as an emerging market and a new services sector (Odaga, 2015). The two notions are the hallmarks of the new global governance agenda for education, driven by neoliberal policies of the World Bank and the IMF, and led by a powerful coalition of global actors that includes leading nation states and multilateral institutions.

In 1981, the World Bank and the IMF converged on development neoliberalism, to embrace structural adjustment (Boas & McNeill, 2003). This was a strategy to ensure the deficits in

African countries were managed so that the IMF creditors could be paid. By 1981, African countries owed 59 per cent of the total IMF loans. Their debt burden to the IMF was 10-fold that of 1960s. To ensure no default, the structural adjustment programme was launched to achieve macroeconomic stabilisation. Through stringent fiscal and monetary policies, the programme led to deep cuts in public spending. Credit restraints for the public sector services became the norm to downsize aggregate demands. In what became known as financial programming, the IMF imposed targets on fiscal deficit to GDP. To achieve its objectives, credit was allocated in tranches depending on the country's adherence to these targets. Aid money, intended for social services, such as education and health, was diverted into foreign reserves. No domestic borrowing was allowed; state owned enterprises were privatised; recruitment of teachers frozen; teacher training colleges closed; subsidies removed and public service wage caps imposed as part of the so-called structural adjustments (Odaga, 2015).

The result was a market-oriented economy and a new global governance system, which dominated most of the economic policies developed with the support of the World Bank and the IMF during the Structural Adjustment programmes (SAPs). The process did not include the participation of key national stakeholders. As put in the interviews, "*members of Parliament and civil society were not represented in policy dialogue*" (Greg, from interviews). Negotiations were a matter between the IMF, World Bank experts and government officials. The lack of participation, transparency and accountability undermined development and led to policies that put the interest of the IMF and the World Bank at the centre of the Structural Adjustment Programme (SAP) (Odaga, 2015). This caused a crisis of development, characterised by policies which led to employment freeze and wage caps. Few graduates could be trained and employed. Subsidies were removed and user fees were introduced in education, health and water (Armbruster, 2008; Katsuki, 2018). There were no doctors, teachers and nurses in hospitals, particularly in the rural areas.

The failure of the SAPs and the civil unrest that followed, led the World Bank and IMF to review their policies; this led to an emergence of the Poverty Reduction Strategy Plans (PRSPs), which officially replaced SAPs. According to the IMF, the SAPs had achieved their objectives (Jules, 2016). African countries had built the reserves they needed to ensure a sustainable external debt

position. This meant that the risk of defaulting on the IMF loans had been eliminated-but at the expense of public service and service provision. The Poverty Reduction Strategy Plans (PRSPs) became the Poverty Support Instrument (PSI). Unlike SAPs and PRSPs, the PSI was not a financing instrument (Jules, 2016). It was a macroeconomic framework designed by the IMF to maintain its hegemony over economic policy. PSI was the basis upon which the core national economic policies were derived. Through PSI, the IMF could determine the policy direction, closely monitor economic policy, gauge how well a country was performing, and send signals to donors and private investors on whether or not a country's economic policy environment was sound enough for foreign investors and investments (Odaga, 2015).

The SAPs led to a deeper crisis of development. By the end of 1990s, terrorism had taken centre stage. Terrorist attacks against the United States' interests both at home and abroad became a common occurrence. This prompted the United Nations to respond. A series of development conferences were convened. In April 2000, the World Education Conference was called. This was followed by the UN Millennium Summit of September 2000 and the Monterrey Financing for Development Conference of 2002. These were in search of a new global compact to respond to the crisis of development.

At this point, the World Bank, which had discouraged any work on poverty eradication, began to work with the United Nations to embrace the idea of sustainable development goals and to expand their development lexicons. In the late 1990s, the IMF had moved slightly ahead of the World. It adopted concepts such as public accountability, civil service reforms, equality and growth, transparency, public resource management and corruption in its narratives (Weiss, 1998). It was this policy shift that became known in the academic circles as the Post Washington Consensus – the idea that the state has a role to play in the market and that, other than being a substitute of one or the other, the state and the market were complementary (Onis & Senses, 2005: 259-264).

In the Structural Adjustment phase, the World Bank, through its policies on user fees, had caused a significant reduction in school participation (Armbruster, 2008). This led to a backlash, which attracted bitter civil society pressure and public condemnation against the Bank's policies. The civil society scrutiny forced the Bank to change course. In its metamorphosis in the 1990s, the

idea of Knowledge Bank was created. Key among its pillars was the concept of public-private partnerships. Public-private partnerships (PPPs) were a modified approach to a global governance agenda (Ball, 1990; 2007). Led by its International Finance Corporation (IFC), the World Bank launched a campaign of privatisation of education. This was to bring the private sector into the fray as both a provider and financier of education.

The Bank's strategy was to restrain public expenditure, find alternative providers of education and eventually remove the state as a provider and financier of education. It focused on increasing the percentage of education delivered by private schools in both Africa and Asia. It claimed that a large part of education was already paid for willingly, at a much higher quality than those funded by the state in the same locations. It conducted studies, which showed that private education was better in quality than public education and that teachers' wages would be significantly higher (Dixon & Tooley, 2005: 30). It argued that the potential for profits makes the education sector worth investing in, in the long term. It mobilised the private sector companies to invest in education, arguing that the prospect of profit would create an incentive for investors to replicate high quality educational provisions globally and that this would assist developing nations to tackle inequality in education as a whole (Tooley, 2000; Tooley & Dixon, 2003; 2007a; 2007b; Dixon & Tooley, 2005).

The World Bank's 2020 education strategy that came three decades after the structural adjustment programme represented the same coherent strategy, to reduce the role of the state as provider and regulator, expand that of the private sector and advance powerful neoliberal interests. This was to be achieved through what it would present under the UN Millennium Development Goals and the UN Sustainable Development Goals as innovations in education provision through public-private and multi-stakeholder partnerships (Odaga, 2015). The World Bank (1997) focused on limiting the role of the state in higher education (World Bank, 1997) and private sector provision and financing of education (World Bank, 2006), arguing that this would bring equity and efficiency and accelerate the growth of tertiary education in sub-Saharan Africa (World Bank, 2009).

This development was shaped in partnership with the United Nations (UN). According to the UN, "unleashing entrepreneurialism" in education would stimulate access (Cammack, 2006). In

this new approach, the poor were not seen as victims, but as resilient, creative entrepreneurs and conscious consumers. According to the World Bank, there were over 1.2 billion people living under \$2.00 per day. This presented a huge market potential for private sector innovations and investment opportunities in education, which, apparently, offered endless untapped opportunities to open education to the market. This would enhance the supply as well as the quality of human capital (Patrinos & Sosale, 2007; Odaga, 2015).

Within a month of his appointment as UN Secretary General, Kofi Annan travelled to the World Economic Forum in Davos. While there, he put forward his plan to restructure the UN system. The two-year process would see Mark Malloch Brown, the World Bank Vice President, taking over as the United Nations Development Programme (UNDP) administrator. Malloch incorporated a market driven agenda, a replication of the World Bank policies, into the UN system (UN, 1997; 2004a; 2004b; 2005; 2006). In Kofi Annan's vision, strengthening the United Nations would require a stronger alliance with the Breton Woods' institutions, and the private sector. This would speed up the realisation of the Millennium Development Goals, so it was hoped (UN, 2004b; 2005; 2006). According to Paul Cammack (2006), this was "a new imperialist project" aimed at exporting a Western style of capitalism in the name of development (Cammack, 2006: 1).

### **4.3 The public university educational distribution system in Uganda**

Higher education in SSA has gained greater prominence. Its relevance has increasingly been acknowledged, particularly in the provision of knowledge, innovation, skills and technology essential in a globalised economy (Kotecha et al., 2012). In Uganda, 60 000 to 70 000 students qualify each year. Only about 35 per cent of those who qualify (25 000 students) find places in tertiary and higher educational institutions. Of these, just under a fifth (4 000 or 16 per cent) are sponsored by government through competitive national merit and district population quota-based systems of governance. In 1991, the Affirmative Action programme was introduced in Uganda's public university educational distribution system to address gender disparity. This was in response to concerns that gender was the main hindrance to girls and women's education. In 1990, a bonus intervention approach to Affirmative Action was incorporated in public university admission criteria to compensate girls and women from the effects of historical injustices in

public university education. Consequently, in 1991, Makerere University's Senate instituted a 1.5-point bonus intervention scheme to address the imbalances caused by history, tradition and customs of admission. The aim was to boost female uptake in undergraduate programmes. The 1.5-point bonus intervention targeted women irrespective of backgrounds or status in society.

Since 2005, up to 75 per cent of public university educational opportunities are distributed through the national merit system. Twenty-five per cent is distributed through a district population quota-based policy and system of governance. To date, the national merit and district quota systems remain the two pillars of the distribution system, supported by a complementary 1.5 bonus intervention scheme for women. In the distribution system, gender is complementary to the national merit and district quota systems. While the national merit and district quota systems are independent, gender is dependent on them. While the two variables have specific quotas, gender has none. It is neither an integrated nor an independent variable in the public university educational distribution system. It is taken into account as a bonus to the national merit and district quota systems of governance. The bonusification of gender is perhaps the biggest challenge for equity and equality, facing the Uganda's public university educational distribution system to date.

Annually, the best 3 000 students with the highest combination of Advanced (A level) and Ordinary (O level) level results are selected under the national merit system and placed in public university fields of study identified as critical for national development, across eight public universities (MoES, 2018). Another 1 000 students (25 per cent of 4 000 slots in total) are distributed through a limited district quota system. The quota system is distributed as follows: (i) 40 out of the 1 000 slots available are reserved for sports men and women; (ii) 64 for persons with living with disabilities; and (iii) 896 allocated under the district quota system.

The two distribution channels are mutually exclusive. Programmes marked for national merit do not admit candidates through the district quota system. For the district quota system, it is required that candidates apply for programmes not offered under the national merit system. In the district quota system, candidates who sit for A level exams at schools located in their districts of origin get preference. Makerere University takes more than half (500 students). The rest is distributed to seven other public universities including Kyambogo, Gulu, Busitema and Mbarara

Universities respectively. In recognition of the failure of the national merit system, district quota was incorporated in the admission policy and practices in 2004 to ensure equally competitive students from underprivileged schools in remote districts of Uganda were being reached. The districts slots would be allocated in line with population quota.

While the district quota policy is vital for equity, so is the effectiveness with which such policies are implemented. Apart from choosing the right policies, good governance is required to ensure that those policies have their desired effects (Asian Development Bank, 1995). For this to happen, the government needs to adopt norms of behaviour that ensure equity and equality in order to deliver the promise. At the same time, it is important to recognise that achieving equity and equity in education requires stability in broad policy direction, flexibility in responding to market signals and discipline in taking measures necessary for meeting long-term objectives despite short-term difficulties (Asian Development Bank, 1995). This requires government action to address systemic imbalances from time to time. The keys areas for governance are to prevent the failure of the national merit system and to promote equity. This requires that policies, which best suit these responsibilities, are put in place and followed (Asian Development Bank, 1995: 6). Once policy choices are made, good governance is required to ensure that those policies are implemented effectively and consistently. In the context of the distribution of higher education in Uganda, governance is synonymous with sound management of the national merit and district quota systems. It is related to the effectiveness with which public university educational opportunities are distributed and the impact of distribution policies and systems on equity. It is also about the levels of transparency, accountability, participation and predictability in dealing with the distribution of public university education in districts where significant inequality exists in spite of increased access over the last two decades.

#### **4.4 The policy and legislative framework for the distribution of education in Uganda**

Uganda's education is governed by several international treaties to which a signatory. Key among these is the Convention on Elimination of all Forms of Discrimination against Women (CEDAW), the Convention on the Rights of the Child (CRC) and the African Charter on the Rights and Welfare of the Child (Close, 2014). Adopted by the United Nations (UN) General

Assembly in 1979, article 2 of CEDAW commits state parties to: (i) eliminate discrimination against women; (ii) embody the principle of the equality of men and women in their national constitutions and legislation; (iii) adopt appropriate legislations and measures to protect the rights of women on an equal basis with men; (iv) refrain from engaging in any act or practice of discrimination; and (v) ensure that public authorities and institutions confirm and abolish laws, regulations, customs and practices which constitute discrimination against women (CEDAW 1979, articles 1-2). These international treaties seek to commit state parties to ensuring equity and equality, eliminating gender disparities, achieving gender equality, ensuring an inclusive and equitable quality education and lifelong learning opportunities, and empowering women and girls.

Article 21 of the 1995 Constitution of the Republic of Uganda provides for equality and non-discrimination for all (GoU, 1995). Article 32 affirms the right to Affirmative Action for disadvantaged groups to address disadvantages associated with past and present discrimination, and ensure that public institutions, such as universities, Parliament and public service, are representative of the national character of Uganda's populations.

Since 1973, Uganda has developed a culturally and historically specific regulatory framework in line with its commitment to ensure inclusive and equitable quality education and lifelong learning opportunities for all. The regulatory framework includes the National Curriculum Development Centre Act of 1973; the Uganda National Examinations Board Act of 1983; Education Act of 1970, amended in 2008 as the Education (Pre-Primary-Primary and Post Primary) Act 2008; the Business Technical, Vocational Education and Training Act of 2008; the Equal Opportunities Commission Act of 2007; and Universities and Other Tertiary Institutions Amendment Act of 2001.

Table 4.1 below provides a summary of Uganda's regulatory and policy framework for the distribution of education that evolved over the last 45 years:

**Table 4.1: A summary of Uganda’s regulatory and policy framework over the last 45 years**

	LEGAL INSTRUMENT	YEAR OF COMMENCEMENT
1	The National Curriculum Development Centre Act 1973	1973
2	The Uganda National Examinations Board Act 1983	1983
3	Constitution of the Republic of Uganda	1995
4	The Universities and Other Tertiary Institutions Act, 2001	2001
5	National Physical Education and Sports Policy	2004
6	Basic Education Policy for Educationally Disadvantaged (Non Formal Education Policy, 2011)	2006
7	School Facilities Grant (SFG) for Primary Schools: Planning and Implementation Guidelines for District and Urban Councils	2007
8	Convention on the Rights of Persons with disabilities	2008
9	The Education (Pre-primary, primary and Post primary) Act, 2008	2008
10	The Business, Technical Vocational Education and Training Act, 2008	2008
11	Early Childhood Development (ECD) Policy	2008
12	Education Sector Strategic Plan	2008
13	Guidelines on: Policy, Planning, Roles & Responsibilities of Stakeholders in the Implementation of Universal Primary Education (UPE) for Districts and Urban Councils	2008
14	Strategic Plan for Universal Secondary Education in Uganda 2009-2018	2009
15	Gender in Education Policy	2010
16	Guidelines for Early Childhood Development Centers	2010
17	Basic Requirements and Minimum Standards Indicators For Education Institutions	2010
18	Handbook on Teacher/Instructor/Tutor Education and Training Policies	2010
19	Education and Sports Sector (ESS) HIV Prevention Strategic Plan 2011-2015	2011
20	BTVET Strategic Plan 2011-2020: Skilling Uganda	2011

21	Career Guidance Handbook (Careers and Occupational information for Students & Guidance Practitioners)	2011
22	Special Needs and Inclusive Education Policy 2011	2011
23	The Uganda Students' Higher Education Financing Policy	2012
24	The Education and Sports Sector Annual Performance Report (ESSAPR FY2012/13)	2012
25	USE/UPPET National Headcount Report	2012

The regulatory and policy framework addresses the role, functions and implications of equity and equality in the social, cultural and historical context of “men’s dominion over women” (Haslanger & Haslanger, 2012) in the education system. It legislates gender and locates it as a subject of policy making in respect of the distribution of education and other benefits of a modernizing economy and development. Under Affirmative Action laws, for instance, gender is a special object of policy focus. It plays a regulatory role by providing a filtering mechanism used as tool for social stratification to engender multiple processes of decision-making. Some of these are processes of “internal exclusion, and differential exclusion” (Mezzadra & Neilson, 2013). This provides the potential for social advancement for women, within a hierarchical framework of codes and regulations in which that advancement may be “encouraged or discouraged” (Yuval-Davis, 1997: 12) depending on context, politics and epistemology.

The Universities and Other Tertiary Institutions Act establishes a governing system for institutions of higher education. It provides the framework that regulates and guides the establishment and management of higher institutions of education in the country (The Universities and Other Tertiary Institutions Act, 2001). The Equal Opportunities Commission Act (2007) was enacted by Parliament in line with articles 1 and 2 of CEDAW (CEDAW, 1979, article 2), and articles 32 (3) and 32 (4) of the Republic of Uganda’s Constitution. It aims to eliminate discrimination and take Affirmative Action in favour of groups marginalised based on gender, history, tradition or custom (EOC, 2007). The Equal Opportunities Commission Act, states that:

*discrimination means any act, omission, policy, law, rule, practice, distinction, condition, situation, exclusion or preference which, directly or indirectly, has the*

*effect of nullifying or impairing equal opportunities or marginalizing a section of society or resulting in unequal treatment of persons in employment or in the enjoyment of rights and freedoms on the basis of sex, race, colour, ethnic origin, tribe, birth, creed, religion, health status, social or economic standing, political opinion or disability (ULII, Equal Opportunities Commission Act, 2007, part I).*

The Act provides for equal opportunities in access to social services, education, employment and physical environment (EOC, 2007). It states that

*gender means the social and cultural construct of roles, responsibilities, attributes, opportunities, privileges, status, access to and control over resources and benefits between men and women, boys and girls in a given society.*

*marginalization means depriving a person or a group of persons of opportunities for living a respectable and reasonable life as provided in the Constitution*

*person includes any individual, firm, company, association, partnership or body of persons, whether incorporated or not.*

*(EOC, 2007, Act 2, Equal Opportunities Commission Act, 2007: 2-3).*

The Education Act of 1970 was amended as Education Act (Pre Primary-Primary and Post Primary, 2008). It gives full effect to education as a function of government, while recognising the principle of decentralisation of education services in the country. The Act makes basic education free and universal. It mandates the state to provide three levels of education: (a) primary; (b) post primary; and (c) tertiary and university education. According to the Act, Pre-primary education would not be run or provided for by the state. The responsibility for financing it would be that of the parents or guardians.

To clarify what role the state would play in the provision of Pre-primary education, an Early Childhood Development (ECD) Policy was introduced in 2008 (Ejuu, 2012). The ECD policy lays a strong emphasis on the regulatory role of the state in ECD programmes and in promoting and strengthening the co-ordination, partnership, networking and linkages among service

providers. A further set of Guidelines for Early Childhood Development Centre was issued in 2010 to provide the procedures, standards and regulations for stakeholders wishing to get involved in running ECD Centres (Ejuu, 2012).

The 1973 National Curriculum Development Centre Act provided for the establishment of the National Curriculum Development Centre, its constitution, management and functions, to regulate all matters related to curriculum development and quality of schooling. Five years following the enactment of the National Curriculum Development Centre Act in 1973, the Uganda National Examinations Board (UNEB) Act was enacted by Parliament in 1978. The Act established the Uganda National Examinations Board, designating its functions and management as the country's top institution that governs all matters connected to examinations and certification of learning outcomes for primary and secondary education.

Since 1978 the Uganda National Examinations Board has played a lead role in setting the standards for the distribution of secondary, tertiary and higher educational opportunities in Uganda. At all three levels of education, students are allocated to their respective schools solely on the basis of their performance in national examinations. The examination policy and systems are governed by UNEB, based on the learning standards established by the National Curriculum Development Centre. To distribute students, Primary Leaving Exams (PLE) is given at the end of grade seven (7). PLE is the basis for deciding which child would be best suited for which school. In senior, four (grade 11); students take Ordinary-level examinations. Like PLE, the top graders enjoy the most realistic chance of joining a top secondary school, which subsequently earns them the privilege of getting into a public university after two years of Advance Level Secondary education. Official UNEB results are either about pass or fail. As such, passing the UNEB exam is an essential path for success in later life.

In the history of Uganda's education system, the issue of equity and equality in access at all levels has always been a major conundrum. Recognising the challenge, the Education and Sports Sector Strategic Plan (ESSP) (2017-2020; MoES, 2017: 6) states that it was formulated to ensure free, equitable and quality primary and secondary education for all. The objective of the strategic plan is in line with the goal for education for all agenda, to eliminate gender disparities in education and ensure equal access at all levels and for all, including for the vulnerable, persons

with disabilities, indigenous peoples and children in vulnerable situations (Tikly, 2017). The Plan recognises the transformational role of education. It states that, by transforming the education systems, unleashing innovations, prioritising inclusion and expanding financing, the goal of equity and equality at all levels and for all can be attained by 2030 (MoES, 2016; MoES, 2017: 6-8). As part of the national agenda for equity, equality and empowerment, the Basic Education Policy, formerly known as the Non-Formal Education Policy, addresses the issue of the inclusion of children, especially those excluded from the formal school system. It provides for a complementary basic education system for educationally disadvantaged children. This was an attempt to make the formal school system more responsive in the multiple and contradictory contexts of Ugandan society.

The distribution of public university educational opportunities in Uganda has always been a matter of national merit. It was not until 2005 that it became a function of two policy prescriptions. Effective from 2005/2006 academic year, a district quota system for public university educational distribution was introduced. This was the second reform in the distribution of public university education in 15 years. The Ugandan national merit system is based on a model in which social mobility depends on one's intelligent quotient (Kamolnick, 2005). It is based on the philosophy of meritocracy, where influence is assigned largely according to the talent and achievement of the individual (Ansgar, 2011; Young, 2001). It relies on a selective secondary school system under which the students' grades determine the type and the quality of school they are allocated. From primary through to secondary and tertiary levels, pupils are allocated to their respective schools according to their examination grades. The better the student's grade, the better the quality of school to which he/she is assigned. The purpose of the quota policy was to make the distribution system fairer, to ensure that candidates who sit their entry Advanced level examinations from underprivileged schools in home districts in remote areas have access to public university education. Under the new policy, the national merit system would be assigned 75 per cent of public university government sponsored opportunities. The remaining 25 per cent would be distributed through a district population quota-based system.

In 1990, the national merit system for public university educational distribution was revisited to incorporate a gender-based Affirmative Action policy. This entitled Ugandan women to 1.5

bonus intervention points for public university entry. The complementary bonus scheme required public universities to grant admission to qualified women on the benefit of the bonus points. At this point in Uganda's history, there was an increasing focus on the role of women in higher education in response to the need to address structural biases to boost female admission to undergraduate programmes. Prior to 1990, higher education was a purely a male domain, with most public benefits – access to jobs, income, power and resources – going to the men.

Consequently, the Affirmative Action policy resulted into a new requirement for women in the public university admission criteria. However, it did not address the crux of the matter – the issue of women's exclusion from higher education, which is rooted in the obstacles faced by the majority of girls within the primary and secondary school system (Tumuheki, Zeelen & Openjuru, 2016). By 1990, the lack of representation of women in higher education in Uganda had become an issue of national political governance. However, the preceding inequality at the level of primary and secondary education was not resolved and has continued to the present. While the national merit and district quota systems had specific quotas, the 1.5 bonus intervention policy was complementary. Unlike the national merit and district quota policies, no specific quota or targets were assigned to the 1.5 bonus intervention programme, meant to tackle gender disparity, the very root cause of women's exclusion from education. The bonus approach meant that it was not mandatory to admit women to public university education simply because of the bonus. Women could be admitted under the national merit and district quota systems, if they meet the same minimum threshold as men with the help of an additional 1.5 points.

The Affirmative Action policy itself was a matter of political ideology of the government of the National Resistance Movement (NRM). Arguably, of more significance was the need to garner the political support of women rather than address the problem from the roots. Affirmative Action therefore became a political ideology. At the national governance level, access to higher education and women's representation in Parliament were clearly sites of patronage politics.

The Ugandan Ministry of Education (MoES, 2009; 2016) states that the implementation of its Gender and Education Sector Policy (GEP) enabled the education sector to register important progress in promoting more equitable access to education. This progress, to which the Ministry lays claims, was limited to gender parity in primary enrolment as well as in secondary schools.

Although the Gender in Education Policy (2009; 2016) aims to promote an enabling and protective environment to enhance equal participation in education for all (MoES, 2016), the Policy did not go far enough. By not designating specific gender quotas or targets for higher education and in all career fields critical to economic growth and development, gender is understood and treated as a mere bonus. Its meaning, function and implications are not fully integrated into the main facets of the distribution policies of public university education or in the primary and secondary education systems.

The introduction of the district quota system was an attempt to address the failure of the public university educational distribution system, to ensure that students from underprivileged schools in remote districts were not being left out and excluded from public university education. In its report, the Ministry of Education states that the idea of a quota system was to allow gifted students from underprivileged schools in remote districts of Uganda access to quality public university educational opportunities. The system was to give preference to candidates who sat Advanced level examinations in schools located in their home districts. Under the policy, district allocation for public university slots would be aligned with district population quota, against the backdrop of high levels of inequality in the distribution of public university educational opportunities. There was recognition, through the district quota system, that the national merit system had led to the design of a public university educational distribution system that favoured the elite. A different approach – a district quota system – was designed and operated from 2005 to restore national balance and fix inequality created by the national merit system.

The Education Sector Strategic Plan's goal is to increase equity and equality in the provision of education, improve the quality and relevance and strengthen the efficacy of delivery of education in the country (MoES, 2016). The plan aims to transform society through quality education and sustainable human resources development. The Strategic Plan for Universal Secondary Education 2009-2014 also aimed to provide equitable quality secondary education, make secondary education relevant to the needs of the country and increase the efficacy with which it is delivered. The transformative role of education requires that the minimum resources necessary be in place for every child to stay longer in school, complete secondary education and make the transition that they need to tertiary education.

Equity and equality in the distribution of higher education in Uganda a major conundrum. While the number of students enrolled at tertiary institutions have increased over time;

*The distribution system has tended to favour the students---- selected from the high end of society. It still excludes too many students from underprivileged areas of the country, -----particularly those in remote rural districts, who make up the majority of the student body in the country (Major, from interviews).*

Institutional barriers need to be addressed. Key among these is the need to ensure more girls and women complete primary and secondary education and make the transition that they need to tertiary education. This is not a matter of legislation; but good policies and practices, as well as proper long term planning and prudent financing models. Following the introduction of Universal Primary and Secondary Education, Uganda took an important first step to transition its education system from elite to mass and universal stages. To keep this on track, structural reforms are needed-including mandatory minimum requirements such as quotas to distribute the benefits of primary, secondary and higher education more equally at all levels.

*The bonus based Affirmative Action policy ---- does not address the effects of historical injustices on women's education---since---- it was not meant to tackle the history, traditions and customs of admission in those institutions. This explains why women have continued to lag behind even when many do meet the minimum requirements. This is clear example of institutional failure----biases that continue to persist. It is these biases that impede women's progress in education----, particularly their transition from primary to secondary and then to public university education (Wanaka, from interviews).*

Consequently, it appears that imbalances in the history, tradition and customs of the distribution of quality education remain largely unattended. Although it can be argued that the current uptake of women is much higher than it was previously, women still lag significantly behind in most public university colleges. While the College of Humanities and Social Sciences has accommodated one in every two females admitted to public universities from 2009 to 2017, two colleges have carried 80 per cent of all female uptakes in public universities in Uganda. These

are colleges of Humanities and Social Sciences and that of Business and Management.

Uganda has several policy instruments in place to implement its vision – to achieve equitable access to relevant and quality education and training at all levels for all Ugandan society (MoES, 2016). Although the last two decades saw higher levels of access to higher education, the country needs to align its secondary and higher education policy systems, closer to that of its universal primary education, to democratize the higher education system to achieve the participation of at least 50 per cent of the relevant population cohorts.

*Even though we have Universal primary education, Uganda's policy and legislative framework does not commit to any specific goal to achieve mass and universal secondary and tertiary education. There is Universal Secondary education policy. However, we still have an elite secondary school system. At governance level, there is no specific policy or clear plan, which commits all aspects of government ---for instance---- to ensure that at least 70-80 per cent of each subsequent Universal primary school graduates complete secondary school. There is also no such commitment---from what I know---- to ensure that at least 50 percent of each cohort enrolled in primary school today, will be enrolled in some form of tertiary education later on (Winnie, from interviews).*

The Equal Opportunity Act 7 (2010) and the Public Finance Management Act (PFMA) mandate the central and local governments, line ministries and state institutions to take gender equality and equity in resource allocation into account. The Uganda Vision 2040 commits to keeping girls in school, increasing their completion rates and removing institutional barriers to education. The Second National Development Plan (NDPII) 2015/16-2019/21) is another key national policy instrument, which mandates the education sector to promote equal access to education for all, by consciously targeting both women and men and actively engaging all sectors, including local Governments, in mainstreaming gender into their plans, programmes and policies. The Gender in Education Policy 2009 and 2016 provide strategic direction for the delivery of gender equality in the country. They commit all government sectors to deliver sector specific gender policies in order to address social, cultural and historically specific barriers that keep girls out of school.

While primary school net enrolment has surpassed 80 percent, it is only 27 percent at secondary level. Access to higher education is limited under 5 per cent. This is one of the lowest in the region (World bank, 2011a; 2011b; MoES, 2012). After over two decades of Universal Primary Education, major structural adjustments in policies and systems, are needed to align the secondary and higher education with the universal primary school system and reflect the nature of demand for higher education and training in concrete long-term plans and financing models (Scott, 1995; 1998; Sporn, 1999; Trow, 2000).

The 1997 Universal Primary Education (UPE) policy commits to increased opportunities for disadvantaged children at primary and secondary level. The 2007 Universal Secondary Education (USE) policy aims for increased access to the benefit of primary and secondary education. The Business, Technical, Vocational Education and Training (BTJET) Strategic Plan (2012/3-2021/2 identifies equitable access to skills development as a strategy to address barriers that keep girls and women from the key sectors of politics and the economy. The National Resistance Movement (NRM) Manifesto 2016-2021 commits to addressing barriers to girls' education and promoting equitable and quality education. All the above instruments recognise equity and equality in education as a key resource for welfare planning and development in Uganda. The policy framework recognises that equity and equality, in the distribution of quality educational opportunities, is fundamental and that investing in young people equally is the best way to build new assets and improve social welfare for the individual and for society as a whole.

Given the limited availability of resources, the focus of the distribution policy would be to address structural disadvantages. Higher education policy should stress inclusion by considering current realities. This would require greater emphasis on practices that promote the principle of equity and equality, embedded in Uganda's legal framework for education. Consideration for the most excluded groups must go beyond gender, to address disadvantages associated with geography and demography, to ensure that institutions of learning promote the goal of equity and equality for all. Under the current circumstances, policies, systems and practices that emphasise specific quotas or targeted goals for increasing representation of women are needed with clear and verifiable goals. There is need for measurable target at institutional level to ensure that the country is training specific numbers of professionals in all districts of the country with skills for

local and nationwide needs. This would be in line with the values of democratisation of education, embedded in Uganda's Gender and Education Policy. The democratisation process would imply that university programmes, and fields of study, including legal, medical, education, engineering, and especially those at the echelons of the most selective departments, are tackling the challenges of equity and equality in their student base. While the district quota and national merit systems of distribution accounted for 25 and 75 per cent of all public university uptakes respectively, gender has no set target. The bonusification of gender deserves renewed attention in the distribution policy and practices for public university education in Uganda. For gender to become an integral policy variable in the distribution system, the national merit and district quota-based systems should be strengthened with specific designated gender-based quotas.

#### **4.5 Conclusion**

Although Uganda's legislative and policy framework provides for equity and equality in education at all levels, choosing the right policies such Universal Primary education is just the first step. Building capacity for effective long term planning and developing the right financing models is the prerequisite for success. Then there are those institutions that need to their work. These include tribunals, such as university senates, charged with the responsibility to ensure that the policy directives are delivered. These institutions need to be flexible and swift in responding to policy gaps and market failure. Doing so requires that short terms goals and objectives be set and met despite short-term difficulties (Asian Development Bank, 1995). Therefore, attention needs to be placed on specific areas of action to prevent market failure derailing the goal of equity and equality by ensuring that equity seeking policies are followed through and implemented effectively and consistently (Mugambwa, Mwebaza & Namubiru, 2017; Klugman, 2012). This requires the state to be concerned with the effectiveness of policy implementation as well as its impact and the transparency and accountability with which public institutions are committed and are held accountable to realising the policy objective.

The next chapter presents the Fair Share Equity framework, which builds on the concept of equity to explore the phenomenon of inequality in the distribution of public university education in Uganda. The chapter examines the equity gaps in the distribution of public university

education in regions and districts of Uganda. It assesses the functions performed by district population quotas as a measure of inequality in the distribution of public university educational opportunities, in response to the modes of governance used or policies and systems responsible for its distribution in regions and districts of the country. Through the Fair Share Equity Framework, the chapter applies the concept of Equity Index (EI) as a measure of inequality in higher education. It provide analysts and policy makers with the tool to analyse the changing configurations of the social phenomenon of inequality in higher education, identify where Equity Gaps are most concentrated and develop social policies and programmes to ensure that the benefits of educational development reach every part of the country.

# **CHAPTER FIVE**

## **THE FAIR SHARE EQUITY FRAMEWORK FOR HIGHER EDUCATIONAL DISTRIBUTION**

### **5.0 Introduction**

What is ‘equity’? How does the population quota influence ‘equity’ in the distribution of public university educational opportunities in 4 regions and 112 districts of Uganda?

Chapter 5 presents the Fair Share Framework (FSF) of analysis. As presented, the Framework has not been previously reported. It is my own construct, innovation and a new contribution to knowledge. It defines, conceptualises, measures and incorporates the discourse of equity as a ‘third dimension’ of educational distribution. Its development was inspired by 20 years of experience in international development; working with seven major International Non Governmental Organizations (INGOs), as well as with civil society groups and communities in Africa, Asia and Latin America. The Framework was developed in response to the concern for the lack of methodologies that attempt to advance the application and use of the concept of ‘equity’ in public policy analysis and in the investigation of the growing forms of geographical inequality; particularly in regions and districts of countries such as Uganda, where access to development resources such as higher educational opportunities is significantly hampered by the lack of space; owing to the limited state’s capacity for long term planning and inadequate tax-based models for financing of educational infrastructure.

Using the Fair Share Equity Framework, the chapter defines what constitutes ‘equity’ and explores equity as a discourse and a full ‘dimension’ for the assessment of educational distribution. In the application of the methodology, the chapter shows that certain districts were at a much greater advantage than others; and that “the district” mattered a great deal, as a constituted category in Uganda’s public university educational distribution system. It illustrates a clear gap between the government’s attempts to increase access to secondary education and the status of access to higher education. It shows the pitfalls in the governance framework currently guiding the higher education system, which primarily benefits students from a few districts in the

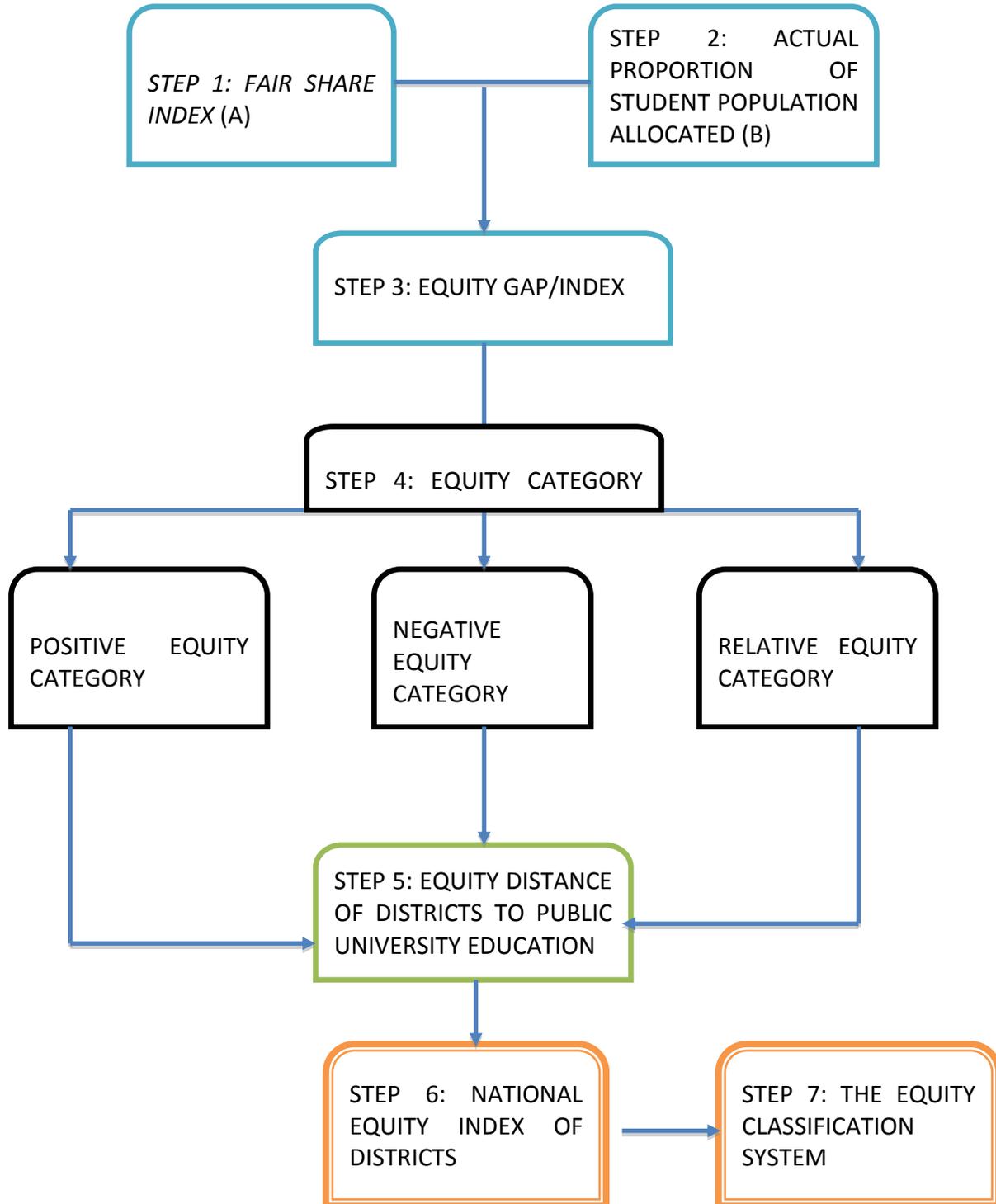
country. This perpetuates a system that rewarded only the privileged. To correct inequality in the distribution of higher education, suggestions are made on the role of public policy, most especially, the need to strengthen the link between government's efforts in ensuring access to secondary education with an open strategy to achieving equity in higher education across the country. The fair Share methodology shows how the feminist Standpoint theory provides for the use of the concept of social location in education; and in the understanding of how inequality in the distribution of higher education can be naturalised and legitimised. It ascertains the nature of districts for which the distribution policy and system was most effective and the category of districts that lagged behind. Suggestions are made to correct inequality in access to higher education, most especially; the role of public policy in strengthening the link between government's efforts in ensuring access to primary and secondary education with an open strategy to achieve equity in higher education across the country. A case is made, that in order to address the social phenomenon of inequality in the distribution of higher education in regions and districts of Uganda, the proportion of all members from each district, who have the minimum level of preparation to participate in higher education should be determined by a Fair Share Index. The use of the Fair Share Index provides a rigorous perspective on the discourse of equity; a perspective, which simplifies investigation and contributes to the scientific vision of the feminist Standpoint empiricism.

### **5.1 How was the Fair Share Equity Framework developed?**

The following seven stages were involved in the process of the development of the 'fair share equity' framework:

1. Step 1: Computation of the Fair Share Index of each district ( $\alpha$ )
2. Step 2: Calculation of the actual share of student population allocated ( $\beta$ )
3. Step 3: Identification of the Equity Index ( $\Sigma$ )
4. Step 4: Estimation of the cumulative Equity Index ( $\mathbb{B}$ )
5. Step 5: Calculation the Average Equity Index ( $\mathbb{G}$ )
6. Step 6: Identification of the equity regulator and categorization of districts into equity categories

Figure 5.0 below provides a graphical representation of the Fair Share Equity Framework:



**Figure 5.0: The Fair Share Equity Framework**

## 5.2 The discourse of Fair Share; its concepts and stages of development

### Step 1: Computation of the Fair Share Index of regions and districts

The concept of Fair Share was used to refer to the degree to which the distribution of public university student population in Uganda's districts is reasonable, relative to the districts' population quota. The 'Fair Share Index' (FSI) therefore equates to the population quota of a district. It is computed on the basis of the country's population figures derived from a given base year. It is the actual proportion of the district population, calculated as a percent of the overall population of the country in a given base year. FSI was calculated using the following mathematical formula:

$$\alpha = \frac{x}{y} \times 100$$

Where:

$\alpha$  Is the Fair Share Index or population quota

$x$  Is the District total population in a given base year

$y$  Is the Country's total population in a given base year

If we assume that the population of district X was 300,000 and that the total population of the country was 35,000,000, then the Fair Share Index( $\alpha$ ) of district X would be 0.875. In other words;

$$\alpha = \frac{300,000}{35,000,000} \times 100$$

$$\alpha = 0.875$$

In the fair share' framework, the FSI represents a percentage or proportion of the total student population, for which district X would be entitled, if resource allocation was based on equity policies and systems of governance, in which resources are allocated in tandem to population quota. The index is based on the principle of equity-the notion that equity is 'fair share' and that the district population quota represents its 'fair share' of resource allocation, in the context of the distribution of development resources such as public university educational opportunities. The

population quota or Fair Share index of each region and district is used as a Standpoint or a baseline to identify the gap between what is and what ought to be. As a baseline in the measure of inequality, the FSI assumes potential inter-group differences in the allocation of resources among regions and districts involved. It assumes that the proportion of allocation of public university student population among already constituted groups of districts, depends on the changing configuration (McCall, 2005) of the population quota and varies from one district of the country to another and from time to time, depending on the changing configurations of the population quota and the policies, systems and practices responsible

### **Step 2: Calculation of the actual share of student population allocated**

The second step in the fair Share method is to calculate the actual proportion of the student population allocated to a region or district of the country ( $\beta$ ) over a given period. This is calculated using the following mathematical formula:

$$\beta = \frac{\eta}{N} \times 100$$

Where:

$\beta$  Is the Actual proportion of total student population allocated to a region or district of the country;

$\eta$  Is the actual number of students allocated to a region or district of the country;

$N$  Is the Total student population;

If we assume that the actual number of students allocated to district X during 2015/2016 and 2016/2017 academic years was 380 out of the total student population of 48,000 nationwide, then the actual proportion  $\beta$  of student population allocated to the district is 0.792. In other words;

$$\beta = \frac{380}{48,000} \times 100$$

$$\beta = 0.792$$

### **Step 3: Identification of Equity Index**

Based on steps 1 and 2 above<sup>1</sup>, the third step in the methodology is to calculate the education Equity Index ( $\Sigma$ ). The Equity Index or Fair Share Gap (FSG) of education represents the difference between the district's Fair Share Index in step 1 and the actual student population allocated in step 2. It is calculated using the following mathematical formula:

$$\Sigma = \frac{x}{y} \times 100 - \frac{\eta}{N} \times 100$$

Where:

$\Sigma$  Is Education Equity Index

$\beta$  Is the Actual percentage proportion of student population allocated to a region or district of the country;

$x$  Is the District population in a given base year;

$y$  Is the Country's total population;

$\eta$  Is the Number of students allocated to the district;

$N$  Is the Total student population;

Building on examples given in steps 1 and 2 above, the Equity Index of district X would be calculated as follows:

$$\Sigma = \frac{300,000}{35,000,000} \times 100 - \frac{380}{48,000} \times 100$$

$$\Sigma = 0.875 - 0.792$$

$$\Sigma = - 0.083$$

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<sup>1</sup> Data was collated from the admission list of five public universities. A total student population of 101 504 from 112 districts of Uganda was analysed from eight academic years (2009 to 2017), including 2009/2010, 2010/2011, 2011/2012, 2012/ 2013, 2013/ 2014, 2014/ 2015, 2015/2016 and 2016/2017)

Education Equity Index is the difference between the population quota or Fair Share index and the actual proportion of the student population allocated to a region or district of the country ( $\beta$ ). The index illustrates the Fair Share Gap in educational distribution– the variation in public university student population from one region and district of the country to another, based on the changing configurations in population quota and the actual student population allocated. It illustrates gains or losses in the public university student population or in resource allocation incurred in per centage terms, by a district over time, owing to the difference between the Fair Share index and the actual proportional allocation of the resource in question. It measures the extent of inequality in distribution of public university educational opportunities as a resource in regions and districts of the country.

#### **Step 4: Estimation of Cumulative Equity Index**

The Cumulative Equity Index (CEI) of education represents the total number of students to which each district would have been entitled over the eight-year period covered in this study, assuming that student population was allocated on the basis of the population quota. The fourth step in the methodology calculates the Cumulative Equity Index ( $\mathbb{B}$ ), to assess the total number of students to which each district would be have been entitled, if decision for student allocation was based on population quota. It estimates the cumulative number of student uptake opportunities gained or lost in public university educational opportunities by a district or region over a given period. The CEI is calculated using the following mathematical formula:

$$\mathbb{B} = \frac{\Sigma}{100} \times N$$

Where:

$\mathbb{B}$  is the Cumulative Equity Index;

$\Sigma$  Is the Equity Index of Education;

$N$  Is Total student population;

Based on example provided in step 1-3 above, the cumulative Equity Index ( $\mathbb{B}$ ) of district X would be calculated as follows:

$$B = \frac{0.083}{100} \times 48,000$$

$$B = 39.84$$

This implies that district X lost 40 public university educational opportunities over the period 2015/2016 and 2016/2017 academic years.

### **Step 5: Calculation of Average Equity Index**

The Average Equity Index (AEI) is an estimate of the average actual number of students missed or gained by a district annually based on the gap between the actual proportion of allocation and the district Fair share index. The fifth step in the methodology calculates the Average Equity Index of Education ( $G$ )-to estimate the number of students missed or gained by a district in one academic year based on its equity index value. It is calculated using the following mathematical formula:

$$G = \frac{B}{\lambda}$$

Where:

$G$  is Average Equity Index;

$B$  is the Cumulative Equity Index;

$\lambda$  is the number of academic years involved;

Building from the example provided in steps 1-4 above, the Average Equity Index  $G$  of district X would be calculated as follows:

$$G = \frac{39.84}{2}$$

$$G = 19.92$$

This implies that district X lost an annual average of 20 public university educational opportunities for the period 2015/2016 and 2016/2017 academic years. The Cumulative Equity

(B) and Average Equity Index (G) values reveal the magnitude of the Equity Gap in the distribution of public university education in a district. While the Cumulative Equity Index estimates the total uptake opportunities gained or lost in public university education over a given number of academic years, the Average Equity Index expresses the average number of missed opportunities in a single academic year. The higher the Average Equity Index, the more excluded the district is implied, from Public University Education or from the distribution of the resource in question.

**Step 6: The Equity Index Regulator and classification of districts by equity categories**

Equity Regulator refers to an index used to determine the lowest and highest limits of Average Equity Index that defines each of the three equity categories in which districts are classified. The sixth step in the methodology identifies the Equity Index regulator. The regulator makes comparative inter-group analysis in patterns of inequality (Klugman, 2012) or equity gaps among districts possible. It is customized based on the feminist Standpoint theory (Intemann, 2010), to group districts as represented in the following three formulae:

$$\cup n = < \pm 10$$

$$\cup p = > \pm 10$$

$$\cup r = \leq \pm 10$$

Where;

$\cup n = > -10$  Is Negative equity

$\cup p = > +10$  Is Positive equity

$\cup r = \leq \pm 10$  Is Relative equity

**Positive Equity Category ( $\cup p$ ):** Districts in the Positive Equity category are those whose average equity index values are positive. They are districts whose proportions of public

university student population are less than their Fair Share Index or population quota. For a district to belong to the positive equity category, its Average Equity Index must be greater than an average equity index of 10. Positive Equity Category is represented by the following formula:

$$\cup p = > +10$$

**Negative Equity Category ( $\cup n$ ):** Districts in the Negative Equity category are those whose average equity index values are negative. They are those whose proportions of public university student population exceed their Fair Share Index or population quota. For a district to belong to the Negative Equity category, its Average Equity Index values must be greater than negative 10. Negative equity category is represented by the following formula:

$$\cup n = > -10$$

**Relative Equity Category ( $\cup r$ ):** The third equity category is the Relative Equity Category. Districts in relative Equity category are those whose Average Equity Index must fall within an acceptable limit of relativity. These include average equity index values of less than plus or minus 10 or ( $\leq \pm 10$ ). They represent districts whose proportions of public university student population are considered to be neither in excess nor too far below their Fair Share Index or population quota. Relative equity category is represented by the following formula:

$$\cup r = \leq \pm 10$$

Building on the above concepts, the Fair Share Equity Framework was conceptualised and developed to define what constitutes equity. As demonstrated in chapter 5 and 6, the framework was used to measure and incorporate equity as a dimension of higher educational distribution in ways not previously reported. In the fair Share equity framework, the difference between the district's population quota or Fair Share Index and the actual proportion of the public university student population of the district was defined as the district equity/Fair Share Gap in public university education. Districts with the largest education Fair Share Gaps were identified. All 112 districts of Uganda were classified into three equity categories based on the Fair Share Gaps.

The Fair Share Equity framework examines the functions performed by the fair Share index as a measure of inequality. It explores if and how the distribution of public university student population varies, depending on the configuration of population quota from one region and district of the country to another. It assesses variations in the social phenomena in response to the modes of governance used or policies and systems responsible for its distribution of public university educational opportunities as a resource in regions and districts of Uganda.

### 5.3 Findings and application of the Fair Share Equity Framework

#### 5.3.1 Fair Share Index (FSI) of public university education

What is the population quota of the four regions and 112 districts of Uganda based on 2006 national population figures?

Table 5.1 below presents a summary of the population quota or Fair Share Index (FSI) computed for each of the four regions of Uganda based on 2006 national population figures as the base year:

**Table 5.1: Fair Share Index of the regions of Uganda based on 2006 population figures**

REGION	2016 POPULATION	POPULATION QUOTA OR FAIR SHARE INDEX (A)
CENTRAL REGION	6 710 800	18.7
EASTERN REGION	8 663 600	24.2
NORTHERN REGION	7 304 143	20.4
WESTERN REGION	9 220 700	25.7

In the next table (table 5.2), study presents the FSI computed for 112 districts of Uganda. Following the definition of FSI, the table illustrates the percentage of public university student population for which each of the 112 districts of the country was entitled, from 2009 to 2017, if the allocation of the student population was based on the governance dimension i.e. the population quota-based policy, system and practice of governance in which resources are allocated in proportion to each district population quota.

**Table 5.2: Fair Share Index for 112 districts of Uganda based on the 2006 population figures of Uganda as a base year**

DISTRICT	FAIR SHARE INDEX AS	DISTRICT	FAIR SHARE INDEX AS
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	PERCENTAGE OF PROPORTION OF DISTRICT POPULATION		PERCENTAGE OF PROPORTION OF DISTRICT POPULATION
KIBAALE	2.35	BULIISA	0.34
YUMBE	1.45	MOROTO	0.30
ARUA	2.29	BUDAKA	0.61
MUBENDE	2.02	RUBIRIZI	0.37
KASESE	2.02	MOYO	0.40
MAYUGE	1.39	KWEEN	0.27
BUYENDE	0.96	KAMULI	1.42
OYAM	1.12	NTOROKO	0.19
KAMWENGE	1.22	BULAMBULI	0.25
KYEGERWA	0.86	KAYUNGA	1.07
KYENJOJO	1.25	BUKEDEA	0.60
AMURIA	0.80	ABIM	0.33
ISINGIRO	1.43	NGORA	0.41
KIRYANDONGO	0.78	KATAKWI	0.49
BUGIIRI	1.13	MBALE	1.43
ZOMBO	0.70	BUKWO	0.27
SERERE	0.85	KITGUM	0.59
KOLE	0.70	NAKASONGOLA	0.53
ALEBTONG	0.66	UKOMANSIMBI	0.22
MANAFWA	1.03	IGANGA	1.48
KYANKWANZI	0.64	KALANGALA	0.16
AGAGO	0.66	MARACHA	0.27
KOTIDO	0.53	BUDUDA	0.62
APAC	1.08	KISORO	0.82
LUUKA	0.69	LYANTONDE	0.27
NEBBI	1.17	SIRONKO	0.70
BUNDIBUGYO	0.66	MASINDI	0.85
BUIKWE	1.23	BUTAMBALA	0.29
KIBUKU	0.60	LIRA	1.19
KOBOKO	0.61	SOROTI	0.87
LWENGO	0.79	NAKASEKE	0.58
ADJUMANI	0.65	MITOOMA	0.53
KAABONG	0.49	KUMI	0.70
NAMUTUMBA	0.74	BUSIKI	0.00
KALIRO	0.70	KIBOGA	0.43
NAKAPIRIPIRI	0.47	KANUNGU	0.73

NWOYA	0.42	KAPCHORWA	0.31
SEMBABULE	0.74	KABAROLE	1.36
GULU	1.28	TORORO	1.51
PALLISA	1.14	BUSIA	0.95
DOKOLO	0.54	SHEEMA	0.60
AMOLATAR	0.43	KIRUHURA	0.97
NAPAK	0.41	IBANDA	0.72
BUTALEJA	0.72	MITYANA	0.95
LAMWO	0.39	LUWEERO	1.33
OTUKE	0.31	NTUNGAMO	1.40
PADER	0.52	KABAAL	1.52
GOMBA	0.46	JINJA	1.36
BUHWEJU	0.35	MPIGI	0.73
BUVUMA	0.27	RUKUNGIRI	0.91
RAKAI	1.50	MBARARA	1.37
AMURU	0.54	MUKONO	1.75
HOIMA	1.70	MASAKA	0.86
NAMAYINGO	0.31	BUSHENYI	0.67
AMUDAT	0.31	WAKISO	6.05
ABERAMAIDO	0.64	KAMPALA	4.37

From 112 districts, the top 20 locations or Standpoints/districts with the largest Fair Share Index (FSI) (in table 4.2 above) were Wakiso (6.05 per cent) Kampala (4.37 per cent), Kibaale (2.35 per cent), Arua (2.29 per cent), Mubende (2.02 per cent), Kasese (2.02 per cent), Mukono (1.75 per cent), Hoima (1.70 per cent), Kabale (1.52 per cent), Tororo (1.51 per cent), Rakai (1.50 per cent), Iganga (1.48 per cent), Yumbe (1.45), Isingiro (1.43 per cent), Mbale (1.43 per cent), Kamuli (1.42 per cent), Ntungamo (1.40 per cent), Mayuge (1.39 per cent), Mbarara (1.37 per cent), Kabarole (1.36 per cent), Jina (1.36 per cent) and Luwero (1.33 per cent).

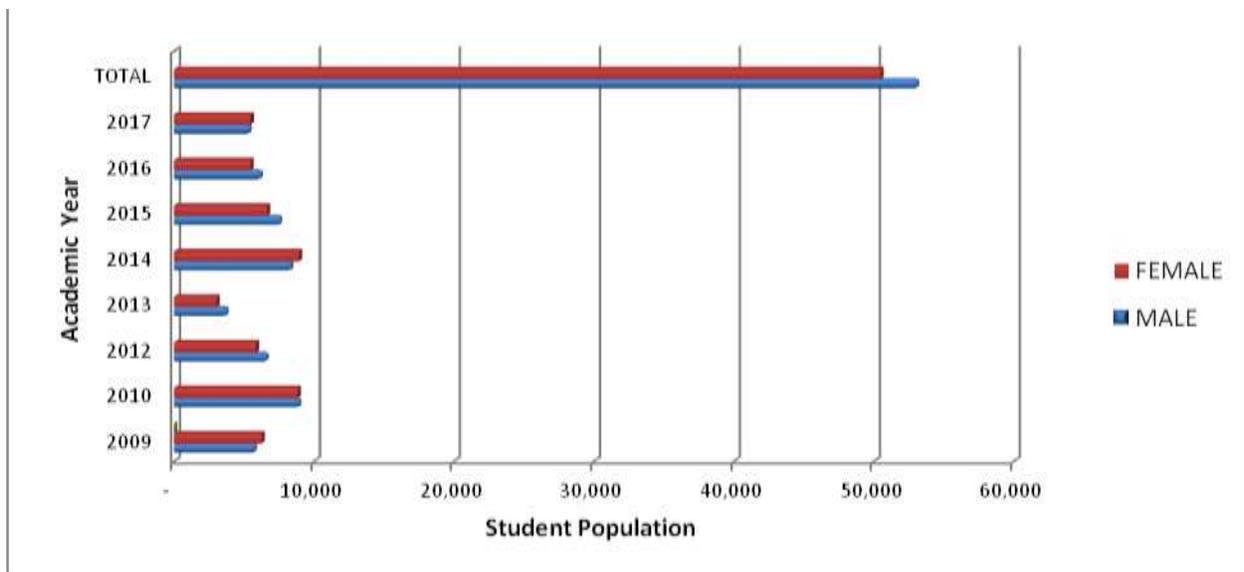
The index is a reflection of the multiple and conflicting dimensions or Standpoints, which the policies, systems and practices used in the distribution of public university student population need to take into account. It illustrates the complexities involved in the analysis and investigation of the discourse of equity in the distribution of resources, policy analysis and policymaking. It provides a formula that recognises the importance of inter-group differences and inequalities to provide a provisional framework of analysis of resource allocation and distribution which focuses on understanding variations “among already constituted groups” (McCall, 2005: 1784-

85), “comparative multi-group analyses” and investigation of groups that constitute each category (McCall, 2005: 1786-87; Yuval-Davis, 2011: 4; Donzelli, 2018).

### 5.3.2 Allocation of student population by region and district

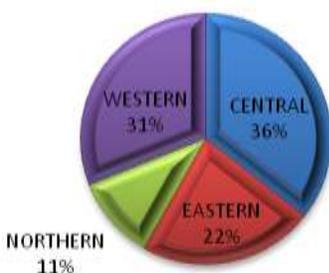
What are the actual proportions of public university student population allocated by region and district of Uganda?

Figure 5.1 below shows a breakdown in the actual composition of the distribution of student population analysed, from 2009 to 2017 by year and gender:



**Figure 5.1: Distribution of 2009-2017 student population by year and gender**

The figure is based on the data of public university student population from 112 districts, admitted to 158 fields of study in five public universities in Uganda from 2009 to 2017. Out of a total statistical sample of 101 550 students, 51.3 per cent were male and 48.7 percent female. Figure 5.2 below provides a summary of the actual proportion of public university student population allocated to each of the four regions of Uganda.



**Figure 5.2: Proportions of the distribution of public university student population in the four regions of Uganda**

Table 5.3 below provides a cumulative summary of the proportions of the distribution of public university student population for 112 districts of Uganda from 2009 to 2017:

**Table 5.3: The distribution of public university students by district from 2009 to 2017**

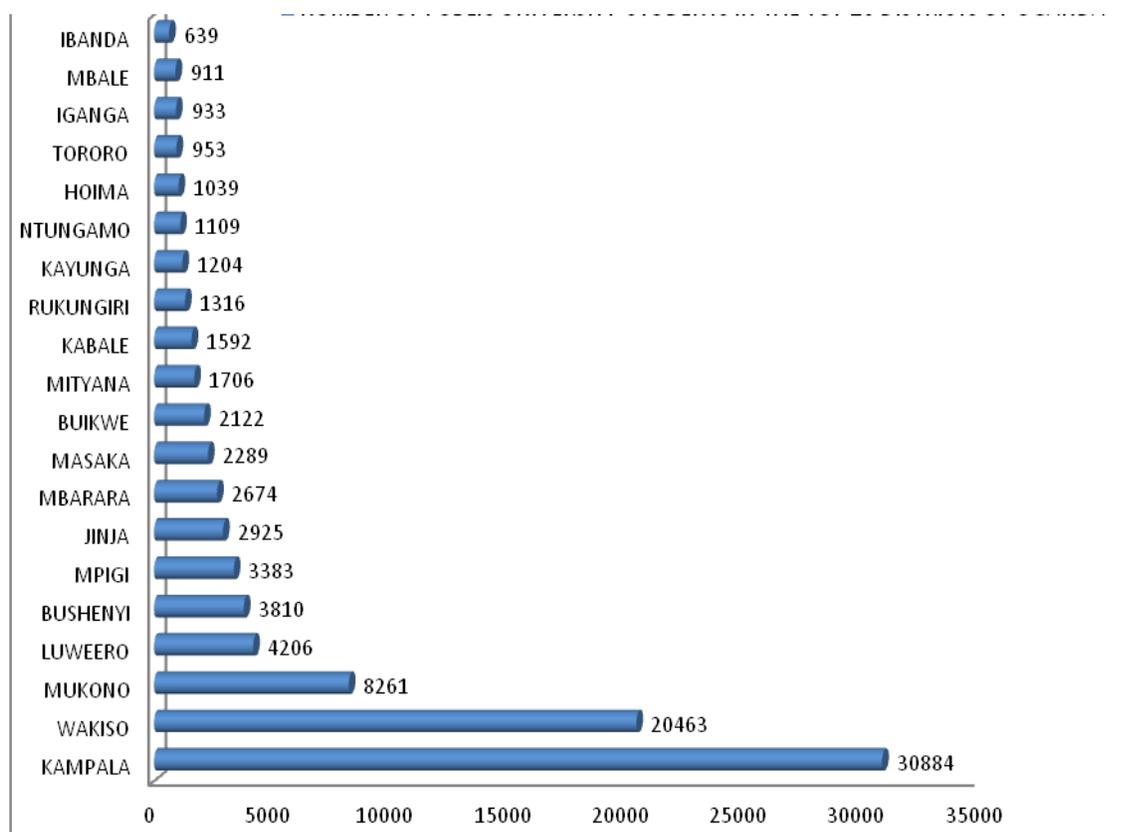
DISTRICT	MALE	FEMALE	TOTAL	MALE PER CENT OF TOTAL	FEMALE PER CENT OF TOTAL	PER CENT OF TOTAL
KAMPALA	15540	15344	30884	29.9	31.0	30.4
WAKISO	10010	10453	20463	19.3	21.1	20.2
MUKONO	4166	4095	8261	8.0	8.3	8.1
LUWEERO	2052	2154	4206	3.9	4.3	4.1
BUSHENYI	1581	2229	3810	3.0	4.5	3.8
MPIGI	1605	1778	3383	3.1	3.6	3.3
JINJA	1796	1129	2925	3.5	2.3	2.9
MBARARA	1677	997	2674	3.2	2.0	2.6
MASAKA	1309	980	2289	2.5	2.0	2.3
BUIKWE	1121	1001	2122	2.2	2.0	2.1
MITYANA	908	798	1706	1.7	1.6	1.7
KABALE	960	632	1592	1.8	1.3	1.6
RUKUNGIRI	372	944	1316	0.7	1.9	1.3
KAYUNGA	592	612	1204	1.1	1.2	1.2
NTUNGAMO	749	360	1109	1.4	0.7	1.1
HOIMA	607	432	1039	1.2	0.9	1.0
TORORO	508	445	953	1.0	0.9	0.9
IGANGA	492	441	933	0.9	0.9	0.9
MPALE	535	376	911	1.0	0.8	0.9

IBANDA	253	386	639	0.5	0.8	0.6
KABAROLE	291	291	582	0.6	0.6	0.6
SOROTI	369	128	497	0.7	0.3	0.5
RAKAI	221	190	411	0.4	0.4	0.4
ARUA	197	149	346	0.4	0.3	0.3
KASESE	154	182	336	0.3	0.4	0.3
KAMWENGE	218	113	331	0.4	0.2	0.3
NAKASEKE	187	132	319	0.4	0.3	0.3
LIRA	196	118	314	0.4	0.2	0.3
SHEEMA	186	108	294	0.4	0.2	0.3
MASINDI	191	97	288	0.4	0.2	0.3
KAMULI	183	101	284	0.4	0.2	0.3
BUSIA	140	123	263	0.3	0.2	0.3
KANUNGU	143	114	257	0.3	0.2	0.3
MUBENDE	131	111	242	0.3	0.2	0.2
KALUNGU	121	113	234	0.2	0.2	0.2
NGORA	122	95	217	0.2	0.2	0.2
KIBAALE	119	80	199	0.2	0.2	0.2
KISORO	97	101	198	0.2	0.2	0.2
GULU	114	76	190	0.2	0.2	0.2
KALIRO	83	101	184	0.2	0.2	0.2
PALLISA	101	71	172	0.2	0.1	0.2
BUTAMBALA	75	97	172	0.1	0.2	0.2
NAKASONGOLA	84	68	152	0.2	0.1	0.1
MAYUGE	83	65	148	0.2	0.1	0.1
KIBOGA	81	65	146	0.2	0.1	0.1
KIRYANDONGO	76	46	122	0.1	0.1	0.1
KIRUHURA	64	51	115	0.1	0.1	0.1
MITOOMA	77	38	115	0.1	0.1	0.1
NAMUTUMBA	67	47	114	0.1	0.1	0.1
KAPCHORWA	52	45	97	0.1	0.1	0.1
LYANTONDE	59	27	86	0.1	0.1	0.1
ISINGIRO	15	70	85	0.0	0.1	0.1
KOLE	11	71	82	0.0	0.1	0.1
BUTALEJA	45	36	81	0.1	0.1	0.1
KALANGALA	36	41	77	0.1	0.1	0.1
NWOYA	44	27	71	0.1	0.1	0.1
BUDAKA	15	55	70	0.0	0.1	0.1
BUKWO	38	32	70	0.1	0.1	0.1

KITGUM	33	30	63	0.1	0.1	0.1
MOROTO	44	19	63	0.1	0.0	0.1
APAC	40	22	62	0.1	0.0	0.1
BUNDIBUGYO	15	47	62	0.0	0.1	0.1
MANAFWA	31	30	61	0.1	0.1	0.1
LWENGO	30	25	55	0.1	0.1	0.1
BUGIRI	35	19	54	0.1	0.0	0.1
KYEJOJO	36	18	54	0.1	0.0	0.1
NEBBI	33	19	52	0.1	0.0	0.1
SIRONKO	25	24	49	0.0	0.0	0.0
NAPAK	0	31	31	0.0	0.1	0.0
OTUKE	18	13	31	0.0	0.0	0.0
KOBOKO	25	5	30	0.0	0.0	0.0
KAGADI	16	14	30	0.0	0.0	0.0
MARACHA	20	9	29	0.0	0.0	0.0
BUKOMANSIMBI	18	9	27	0.0	0.0	0.0
MOYO	12	13	25	0.0	0.0	0.0
KOTIDO	16	8	24	0.0	0.0	0.0
BUKEDEA	20	4	24	0.0	0.0	0.0
KAABONG	12	10	22	0.0	0.0	0.0
KUMI	8	14	22	0.0	0.0	0.0
GOMBA	7	14	21	0.0	0.0	0.0
ADJUMANI	11	9	20	0.0	0.0	0.0
AMURIA	9	9	18	0.0	0.0	0.0
KIBUKU	13	5	18	0.0	0.0	0.0
SEMBABULE	8	10	18	0.0	0.0	0.0
BUDUDA	9	6	15	0.0	0.0	0.0
KWEEN	8	7	15	0.0	0.0	0.0
KAKUMIRO	5	10	15	0.0	0.0	0.0
KABERAMAIDO	11	3	14	0.0	0.0	0.0
AMURU	5	8	13	0.0	0.0	0.0
ABIM	5	7	12	0.0	0.0	0.0
YUMBE	11	1	12	0.0	0.0	0.0
PAIDAH	8	3	11	0.0	0.0	0.0
AMOLATAR	7	3	10	0.0	0.0	0.0
KYEGEGWA	4	6	10	0.0	0.0	0.0
LUUKA	6	3	9	0.0	0.0	0.0
ALEBTONG	3	4	7	0.0	0.0	0.0
DOKOLO	5	2	7	0.0	0.0	0.0

ZOMBO	4	3	7	0.0	0.0	0.0
BULIISA	6	1	7	0.0	0.0	0.0
BUHWEJU	6	0	6	0.0	0.0	0.0
PADER	2	3	5	0.0	0.0	0.0
RUBIRIZI	2	3	5	0.0	0.0	0.0
LAMWO	2	2	4	0.0	0.0	0.0
KATAKWI	2	2	4	0.0	0.0	0.0
SERERE	1	3	4	0.0	0.0	0.0
AMUDAT	2	1	3	0.0	0.0	0.0
BUYENDE	2	1	3	0.0	0.0	0.0
AGAGO	1	1	2	0.0	0.0	0.0
PAKWACH	2	0	2	0.0	0.0	0.0
BULAMBULI	2	0	2	0.0	0.0	0.0
KYANKWANZI	1	0	1	0.0	0.0	0.0
<b>TOTAL</b>	<b>51 976</b>	<b>49 574</b>	<b>101 550</b>	<b>100</b>	<b>100</b>	<b>100</b>

Figure 5.3 below illustrates the cumulative summary of the student population in the top 20 districts with the highest number of public university student population from 2009 to 2017.



### Figure 5.3: Number of public university students in the top twenty districts of Uganda

The Central region of Uganda accounted for 36 per cent of all public university educational opportunities, with women at a slight edge at 50, 5 per cent over men. The western region of Uganda received 31 per cent of the total national share of the student population. Both the central and the western regions accounted for just over two-thirds (68.4 per cent) of all public university educational opportunities distributed in the country. Northern Uganda received 11 per cent of total uptake opportunities over the eight-year period compared to the eastern region of the country with twice as much (22 per cent) share as that of the northern region.

The proportions of the allocation of the student population for each of the top 20 districts to the total were: Kampala (30.4 per cent), Wakiso (20.2 per cent), Mukono (8.1 per cent), Luwero (4.1 per cent), Bushenyi (3.8 per cent), Mpigi (3.3 per cent), Jinja (2.9 per cent) Mbarara (2.6 per cent), Masaka (2.3 per cent), Buikwe (2.1 per cent), Mityana (1.7 per cent), Kabale (1.6 per cent), Rukungiri (1.3 per cent), Kayunga (1.2 per cent), Ntungamo (1.1 per cent), Hoima (1.0 per cent), Tororo (0.9 per cent), Iganga (0.9 per cent), Mbale (0.9 per cent) and Ibanda (0.6 per cent).

#### 5.3.3 Analysis of Fair Share Gap in public university education

What is the difference between the population quota and Fair Share Index of regions and districts and the actual proportions of public university student population allocated?

In the Fair Share Equity Framework, Fair Share Gap refers to the difference between the district's population quota and the actual proportion of public university student population allocated. Table 5.4 below shows the Fair Share Gap in the distribution of public university student population by region of Uganda based on the differences between the actual proportions of public university student population enrolled from 2009 to 2017 and population quota or Fair Share Index for each region:

**Table 5.4: Proportions of student population versus population quota or Fair Share Index of the regions of Uganda based on 2006 population figures**

REGION	ACTUAL STUDENT POPULATION	PROPORTION OF STUDENT POPULATION AS A PERCENTAGE OF	2016 POPULATION	FAIR SHARE INDEX (A)	FAIR SHARE GAP IN PERCENT
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		TOTAL (B)			
CENTRAL	23 423	37.4	6 710 800	18.7	-18.7
EAST	13 757	22.0	8 663 600	24.2	2.4
NORTH	6 239	11.0	7 304 143	20.4	9.4
WEST	19 240	30.7	9 220 700	25.7	-5

Table 5.5 below presents the Fair Share Gap in the distribution of public university student population (B-A) of 112 districts of Uganda based on the differences between the actual proportions of public university student population enrolled from 2009 to 2017 and population quota or Fair Share Index of each district:

**Table 5.5: Fair Share Gaps of 112 districts of Uganda based on the population proportion as at 1st July 2006**

DISTRICT	STUDENT POPULATION (%)	FAIR SHARE INDEX (%)	FAIR SHARE GAP (%)	DISTRICT	STUDENT POPULATION (%)	FAIR SHARE INDEX (%)	FAIR SHARE GAP (%)
<b>KIBAALE</b>	0.69	2.35	1.66	BULIISA	0.13	0.34	0.20
<b>YUMBE</b>	0.09	1.45	1.36	MOROTO	0.11	0.30	0.19
<b>ARUA</b>	1.03	2.29	1.26	BUDAKA	0.43	0.61	0.18
<b>MUBENDE</b>	0.86	2.02	1.16	RUBIRIZI	0.20	0.37	0.17
<b>KASESE</b>	1.06	2.02	0.96	MOYO	0.24	0.40	0.17
<b>MAYUGE</b>	0.47	1.39	0.92	KWEEN	0.11	0.27	0.16
<b>BUYENDE</b>	0.10	0.96	0.86	KAMULI	1.26	1.42	0.16
<b>OYAM</b>	0.35	1.12	0.78	NTOROKO	0.04	0.19	0.16
<b>KAMWENGE</b>	0.48	1.22	0.75	BULAMBULI	0.10	0.25	0.15
<b>KYEGEGWA</b>	0.14	0.86	0.72	KAYUNGA	0.92	1.07	0.15
<b>KYENJOJO</b>	0.54	1.25	0.71	BUKEDEA	0.46	0.60	0.14
<b>AMURIA</b>	0.13	0.80	0.66	ABIM	0.18	0.33	0.14
<b>ISINGIRO</b>	0.79	1.43	0.64	NGORA	0.28	0.41	0.14
<b>KIRYANDONGO</b>	0.15	0.78	0.63	KATAKWI	0.37	0.49	0.12
<b>BUGIIRI</b>	0.50	1.13	0.63	MBALE	1.32	1.43	0.11
<b>ZOMBO</b>	0.09	0.70	0.62	BUKWO	0.16	0.27	0.10
<b>SERERE</b>	0.26	0.85	0.58	KITGUM	0.50	0.59	0.09
<b>KOLE</b>	0.15	0.70	0.55	NAKASONGOLA	0.45	0.53	0.09
<b>ALEBTONG</b>	0.12	0.66	0.54	BUKOMANSIMBI	0.15	0.22	0.08
<b>MANAFWA</b>	0.51	1.03	0.52	IGANGA	1.41	1.48	0.07

<b>KYANKWANZI</b>	0.12	0.64	0.52	KALANGALA	0.12	0.16	0.04
<b>AGAGO</b>	0.14	0.66	0.52	MARACHA	0.24	0.27	0.03
<b>KOTIDO</b>	0.04	0.53	0.49	BUDUDA	0.59	0.62	0.03
<b>APAC</b>	0.59	1.08	0.49	KISORO	0.79	0.82	0.03
<b>LUUKA</b>	0.20	0.69	0.49	LYANTONDE	0.25	0.27	0.02
<b>NEBBI</b>	0.68	1.17	0.49	SIRONKO	0.68	0.70	0.02
<b>BUNDIBUGYO</b>	0.20	0.66	0.46	MASINDI	0.83	0.85	0.02
<b>BUIKWE</b>	0.78	1.23	0.45	BUTAMBALA	0.28	0.29	0.01
<b>KIBUKU</b>	0.15	0.60	0.44	LIRA	1.18	1.19	0.01
<b>KOBOKO</b>	0.17	0.61	0.44	SOROTI	0.87	0.87	0.00
<b>LWENGO</b>	0.36	0.79	0.43	NAKASEKE	0.59	0.58	-0.01
<b>ADJUMANI</b>	0.23	0.65	0.42	MITOOMA	0.54	0.53	-0.01
<b>KAABONG</b>	0.07	0.49	0.42	KUMI	0.78	0.70	-0.08
<b>NAMUTUMBA</b>	0.34	0.74	0.40	BUSIKI	0.09	0.00	-0.09
<b>KALIRO</b>	0.31	0.70	0.39	KIBOGA	0.54	0.43	-0.10
<b>NAKAPIRIPIRI</b>	0.09	0.47	0.38	KANUNGU	0.85	0.73	-0.12
<b>NWOYA</b>	0.04	0.42	0.37	KAPCHORWA	0.44	0.31	-0.13
<b>SEMBABULE</b>	0.42	0.74	0.32	KABAROLE	1.50	1.36	-0.13
<b>GULU</b>	0.98	1.28	0.30	TORORO	1.68	1.51	-0.17
<b>PALLISA</b>	0.85	1.14	0.29	BUSIA	1.15	0.95	-0.20
<b>DOKOLO</b>	0.25	0.54	0.29	SHEEMA	0.82	0.60	-0.22
<b>AMOLATAR</b>	0.15	0.43	0.28	KIRUHURA	1.22	0.97	-0.25
<b>NAPAK</b>	0.13	0.41	0.28	IBANDA	0.99	0.72	-0.27
<b>BUTALEJA</b>	0.45	0.72	0.27	MITYANA	1.54	0.95	-0.59
<b>LAMWO</b>	0.12	0.39	0.27	LUWEERO	2.04	1.33	-0.71
<b>OTUKE</b>	0.05	0.31	0.26	NTUNGAMO	2.15	1.40	-0.75
<b>PADER</b>	0.26	0.52	0.26	KABAAL	2.35	1.52	-0.83
<b>GOMBA</b>	0.21	0.46	0.25	JINJA	2.34	1.36	-0.98
<b>BUHWEJU</b>	0.11	0.35	0.24	MPIGI	1.73	0.73	-1.00
<b>BUVUMA</b>	0.03	0.27	0.24	RUKUNGIRI	2.22	0.91	-1.32
<b>RAKAI</b>	1.27	1.50	0.23	MBARARA	3.11	1.37	-1.74
<b>AMURU</b>	0.32	0.54	0.22	MUKONO	3.56	1.75	-1.82
<b>HOIMA</b>	1.48	1.70	0.22	MASAKA	2.82	0.86	-1.95
<b>NAMAYINGO</b>	0.10	0.31	0.21	BUSHENYI	2.68	0.67	-2.00
<b>AMUDAT</b>	0.10	0.31	0.21	WAKISO	12.61	6.05	-6.56
<b>KABERAMAIDO</b>	0.43	0.64	0.21	KAMPALA	14.30	4.37	-9.93

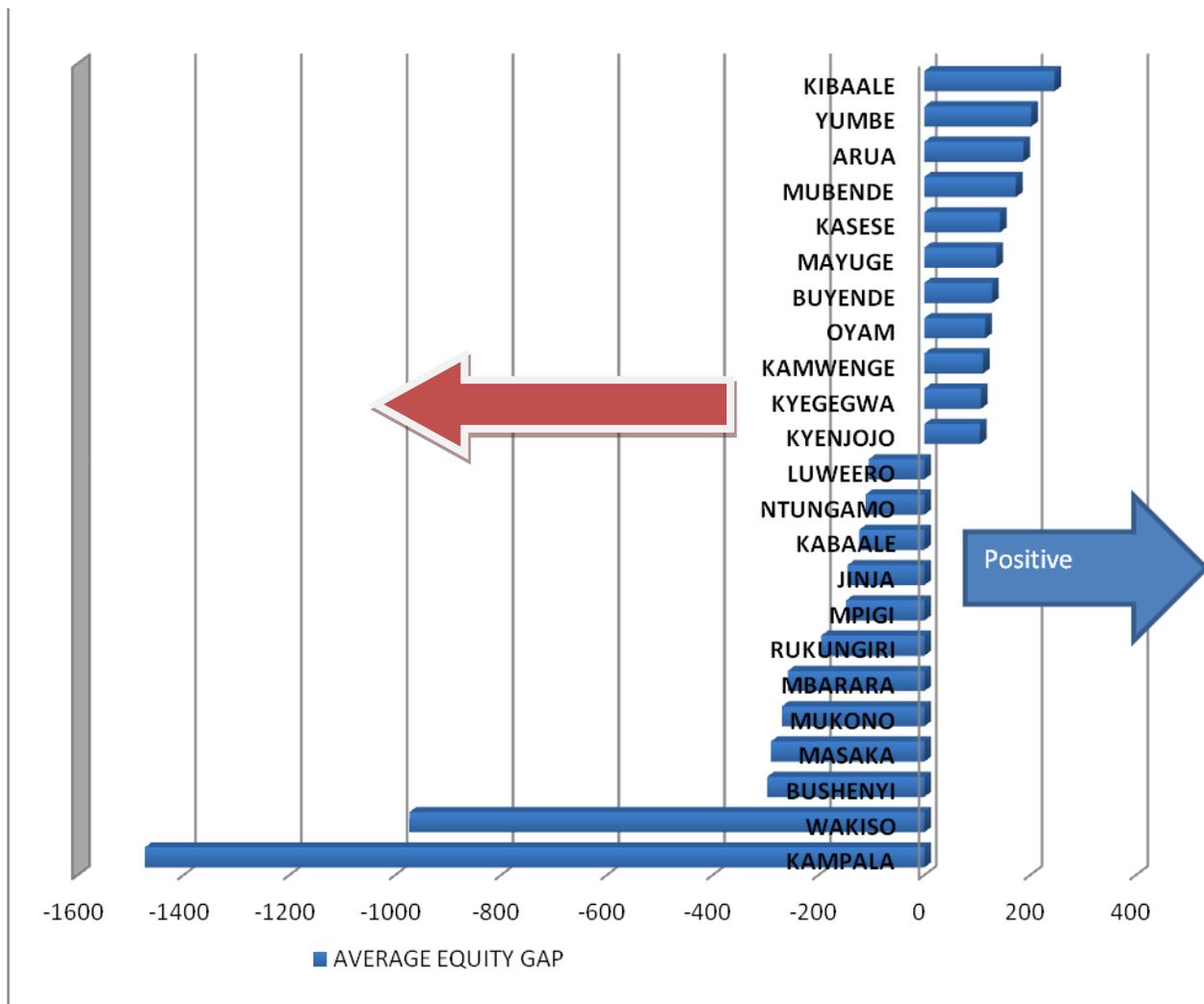
The Equity Index for each district in the table above measures the Equity Gap in public university education from one district to another. It measures and reveals the extent to which the public university educational gap varies from one region and district of the country to another, relative to variations in and changing configurations of population quota. It represents the percentage of the gains or losses in the public student population incurred by a district over time, owing to the difference between the district's population quota and the actual proportion of public university student population allocated. It is a measure of inequality in distribution of public university educational opportunities as a resource in regions and districts of the country, using population quota-based policies and systems of governance responsible for its distribution. It assesses the potential role and functions performed by population quota as a Standpoint in the configuration of policies and systems responsible for the distribution of public university education. It explores if and how policies and systems responsible for the distribution of public university education shift in response to the significance of the population quota as a resource allocation Standpoint in understanding the complexity of the social phenomenon.

### **Inter-group differences in the social phenomenon of inequality in public university education**

Overall, Uganda invested 37.4 per cent of its public university educational opportunities in the central region, 30.7 per cent in the west, 22 per cent in the east and 11 per cent in the north respectively. While the central and the western regions received more than their fair share of student population, the allocation of student population in the east and the north was below the fair share index of public university education of the two regions of the country. At 37.4 per cent, the central region took twice as much as its fair share of 18.7 per cent. The central and the western regions of the country exceeded their fair share (population quota) of allocation by 18.7 per cent and five per cent respectively. The northern region, on the other hand, received 46 per cent less than its fair share. It accounted for only 54 per cent of its expected share of the student population over the eight years, compared to 91 per cent share accounted for by the eastern region of the country.

There were 26 districts (out of 112) whose Fair Share Gaps were negative, 85 districts with positive Fair Share Gaps and one only with a value of Fair Share Gaps of zero (perfect equity).

Districts with negative Fair Share Gaps were those whose proportions of student population exceeded their fair share of student population or population quota. Districts with positive Equity Gaps were those whose proportions of student population were less than their fair share or population quota. The district with zero fair share value had its proportion of student population matching with its population quota or Fair Share Index. Figure 5.4 below is a representation of 23 districts of Uganda with Positive and Negative values of Fair Share Gaps in public university education:



**Figure 5.4: An illustration of 23 Districts in the Positive and Negative Equity categories**

There were ten districts with the largest positive Fair Share Gaps (Table 5.7). These were districts that incurred significant losses in student population, relative to their Fair Share Index or

population quota. This means that the proportions of the student population in these districts were less than the population quota or Fair Share Index of those districts. As seen in the bottom of the scale in Figure 5.4 above, the public university educational distribution system rewarded mostly districts such as Kampala, Wakiso, Bushenyi-that are relatively well off at the expense of the poor.

The value of Fair Share Gaps ranged from 0.0 in Tororo to -9.93 per cent in Kampala. Based on the Fair Share Equity Framework, the range in value of Fair Share Gaps illustrates the magnitude of inequality in the distribution of public university educational opportunities between regions and districts of the country. The higher the value, the higher the level of inequality. The top 20 districts with the largest values of Fair Share Gap were Kampala (-9.93 per cent), Wakiso (-6.56), Kibaale (1.66 per cent), Arua (1.26 per cent), Mubende (1.16 per cent), Kasese (0.96 per cent), Mukono (-1.82 per cent), Hoima (0.22 per cent), Kabale (-0.83 per cent), Tororo (-0.17 per cent), Rakai (0.23 per cent), Iganga (0.07 per cent), Yumbe (1.36 per cent), Isingiro (0.64 per cent), Mbale (0.11 per cent), Kamuli (0.16 per cent), Ntungamo (-0.75 per cent), Mayuge (0.92 per cent), Mbarara (-1.7 per cent) and Kabarole (-0.13).

### **5.3.4 Equity Index or Equity Gap Analysis**

How does the gap between population quota and actual proportions of allocation shape the discourse of equity and the social phenomenon of inequality in higher education in the 4 regions and 112 districts of Uganda?

To examine the meaning, function and implications of the public university educational gap in regions and districts, the combined analytical fair share method was used to calculate the Cumulative Equity Gap (CEG), Cumulative Equity Index (CEI) and the Average Number of Equity Opportunities (AEO). Table 5.6 below provides a summary of the Cumulative values of the Fair Share Gap (CEG), Cumulative Equity Index (CEI) and the Average Number of Equity Opportunities (AEO) for 112 districts of Uganda over an eight-year period:

**Table 5.6: Cumulative and Average Equity Index for 112 districts of Uganda based on the student population of 2009 to 2017**

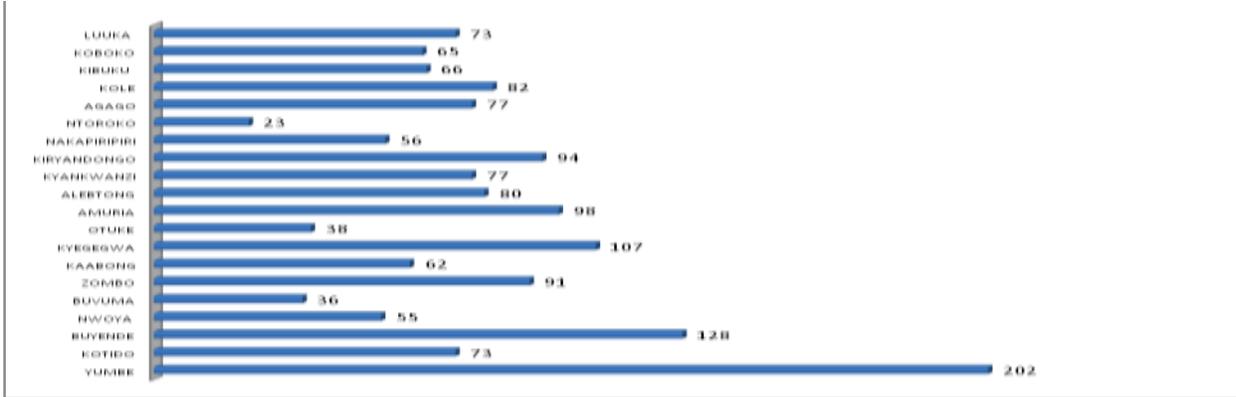
DISTRICT	STUDENT POPULATION PROPORTION	FAIR SHARE INDEX	FAIR SHARE GAP	CUMULAT IVE EQUITY GAP (NUMBER)	CUMULAT IVE EQUITY INDEX	AVERAGE EQUITY OPPORTUNITY (AEO)
<b>KIBAALE</b>	0.69	2.35	1.66	1230	239	246
<b>YUMBE</b>	0.09	1.45	1.36	1008	1461	202
<b>ARUA</b>	1.03	2.29	1.26	934	123	187
<b>MUBENDE</b>	0.86	2.02	1.16	863	135	173
<b>KASESE</b>	1.06	2.02	0.96	714	91	143
<b>MAYUGE</b>	0.47	1.39	0.92	679	194	136
<b>BUYENDE</b>	0.10	0.96	0.86	639	901	128
<b>OYAM</b>	0.35	1.12	0.78	577	225	115
<b>KAMWENGE</b>	0.48	1.22	0.75	553	157	111
<b>KYEGEGWA</b>	0.14	0.86	0.72	535	509	107
<b>KYENJOJO</b>	0.54	1.25	0.71	526	132	105
<b>AMURIA</b>	0.13	0.80	0.66	492	496	98
<b>ISINGIRO</b>	0.79	1.43	0.64	474	81	95
<b>KIRYANDONGO</b>	0.15	0.78	0.63	469	430	94
<b>BUGIIRI</b>	0.50	1.13	0.63	467	126	93
<b>ZOMBO</b>	0.09	0.70	0.62	457	714	91
<b>SERERE</b>	0.26	0.85	0.58	432	221	86
<b>KOLE</b>	0.15	0.70	0.55	408	364	82
<b>ALEBTONG</b>	0.12	0.66	0.54	402	442	80
<b>MANAFWA</b>	0.51	1.03	0.52	387	102	77
<b>KYANKWANZI</b>	0.12	0.64	0.52	386	439	77
<b>AGAGO</b>	0.14	0.66	0.52	386	375	77
<b>KOTIDO</b>	0.04	0.53	0.49	366	1307	73
<b>APAC</b>	0.59	1.08	0.49	365	83	73
<b>LUUKA</b>	0.20	0.69	0.49	364	246	73
<b>NEBBI</b>	0.68	1.17	0.49	362	72	72
<b>BUNDIBUGYO</b>	0.20	0.66	0.46	339	229	68
<b>BUKWE</b>	0.78	1.23	0.45	330	57	66
<b>KIBUKU</b>	0.15	0.60	0.44	330	295	66
<b>KOBOKO</b>	0.17	0.61	0.44	326	259	65
<b>LWENGO</b>	0.36	0.79	0.43	317	118	63
<b>ADJUMANI</b>	0.23	0.65	0.42	309	181	62

<b>KAABONG</b>	0.07	0.49	0.42	308	560	62
<b>NAMUTUMBA</b>	0.34	0.74	0.40	297	118	59
<b>KALIRO</b>	0.31	0.70	0.39	288	127	58
<b>NAKAPIRIPIRI</b>	0.09	0.47	0.38	279	423	56
<b>NWOYA</b>	0.04	0.42	0.37	276	838	55
<b>SEMBABULE</b>	0.42	0.74	0.32	237	76	47
<b>GULU</b>	0.98	1.28	0.30	223	31	45
<b>PALLISA</b>	0.85	1.14	0.29	216	34	43
<b>DOKOLO</b>	0.25	0.54	0.29	212	115	42
<b>AMOLATAR</b>	0.15	0.43	0.28	209	187	42
<b>NAPAK</b>	0.13	0.41	0.28	208	212	42
<b>BUTALEJA</b>	0.45	0.72	0.27	202	61	40
<b>LAMWO</b>	0.12	0.39	0.27	201	234	40
<b>OTUKE</b>	0.05	0.31	0.26	191	503	38
<b>PADER</b>	0.26	0.52	0.26	189	98	38
<b>GOMBA</b>	0.21	0.46	0.25	189	122	38
<b>BUHWEJU</b>	0.11	0.35	0.24	182	224	36
<b>BUVUMA</b>	0.03	0.27	0.24	178	775	36
<b>RAKAI</b>	1.27	1.50	0.23	168	18	34
<b>AMURU</b>	0.32	0.54	0.22	165	69	33
<b>HOIMA</b>	1.48	1.70	0.22	165	15	33
<b>NAMAYINGO</b>	0.10	0.31	0.21	158	211	32
<b>AMUDAT</b>	0.10	0.31	0.21	156	206	31
<b>KABERAMAIDO</b>	0.43	0.64	0.21	153	48	31
<b>BULIISA</b>	0.13	0.34	0.20	152	155	30
<b>MOROTO</b>	0.11	0.30	0.19	142	176	28
<b>BUDAKA</b>	0.43	0.61	0.18	132	41	26
<b>RUBIRIZI</b>	0.20	0.37	0.17	127	84	25
<b>MOYO</b>	0.24	0.40	0.17	125	71	25
<b>KWEEN</b>	0.11	0.27	0.16	118	139	24
<b>KAMULI</b>	1.26	1.42	0.16	118	13	24
<b>NTOROKO</b>	0.04	0.19	0.16	115	398	23
<b>BULAMBULI</b>	0.10	0.25	0.15	112	145	22
<b>KAYUNGA</b>	0.92	1.07	0.15	110	16	22
<b>BUKEDEA</b>	0.46	0.60	0.14	107	32	21
<b>ABIM</b>	0.18	0.33	0.14	106	79	21

<b>NGORA</b>	0.28	0.41	0.14	102	50	20
<b>KATAKWI</b>	0.37	0.49	0.12	86	31	17
<b>MBALE</b>	1.32	1.43	0.11	84	9	17
<b>BUKWO</b>	0.16	0.27	0.10	77	63	15
<b>KITGUM</b>	0.50	0.59	0.09	68	18	14
<b>NAKASONGOLA</b>	0.45	0.53	0.09	64	19	13
<b>BUKOMANSIMBI</b>	0.15	0.22	0.08	56	52	11
<b>IGANGA</b>	1.41	1.48	0.07	51	5	10
<b>KALANGALA</b>	0.12	0.16	0.04	29	32	6
<b>MARACHA</b>	0.24	0.27	0.03	24	14	5
<b>BUDUDA</b>	0.59	0.62	0.03	24	5	5
<b>KISORO</b>	0.79	0.82	0.03	19	3	4
<b>LYANTONDE</b>	0.25	0.27	0.02	18	10	4
<b>SIRONKO</b>	0.68	0.70	0.02	16	3	3
<b>MASINDI</b>	0.83	0.85	0.02	15	2	3
<b>BUTAMBALA</b>	0.28	0.29	0.01	9	5	2
<b>LIRA</b>	1.18	1.19	0.01	8	1	2
<b>SOROTI</b>	0.87	0.87	0.00	1	0	0
<b>NAKASEKE</b>	0.59	0.58	-0.01	-7	-2	-1
<b>MITOOMA</b>	0.54	0.53	-0.01	-9	-2	-2
<b>KUMI</b>	0.78	0.70	-0.08	-59	-10	-12
<b>BUSIKI</b>	0.09	0.00	-0.09	-64	-100	-13
<b>KIBOGA</b>	0.54	0.43	-0.10	-78	-19	-16
<b>KANUNGU</b>	0.85	0.73	-0.12	-88	-14	-18
<b>KAPCHORWA</b>	0.44	0.31	-0.13	-96	-30	-19
<b>KABAROLE</b>	1.50	1.36	-0.13	-98	-9	-20
<b>TORORO</b>	1.68	1.51	-0.17	-127	-10	-25
<b>BUSIA</b>	1.15	0.95	-0.20	-147	-17	-29
<b>SHEEMA</b>	0.82	0.60	-0.22	-164	-27	-33
<b>KIRUHURA</b>	1.22	0.97	-0.25	-186	-21	-37
<b>IBANDA</b>	0.99	0.72	-0.27	-198	-27	-40
<b>MITYANA</b>	1.54	0.95	-0.59	-437	-38	-87
<b>LUWEERO</b>	2.04	1.33	-0.71	-524	-35	-105
<b>NTUNGAMO</b>	2.15	1.40	-0.75	-553	-35	-111
<b>KABAALÉ</b>	2.35	1.52	-0.83	-617	-35	-123
<b>JINJA</b>	2.34	1.36	-0.98	-725	-42	-145

<b>MPIGI</b>	1.73	0.73	-1.00	-740	-58	-148
<b>RUKUNGIRI</b>	2.22	0.91	-1.32	-976	-59	-195
<b>MBARARA</b>	3.11	1.37	-1.74	-1288	-56	-258
<b>MUKONO</b>	3.56	1.75	-1.82	-1347	-51	-269
<b>MASAKA</b>	2.82	0.86	-1.95	-1449	-69	-290
<b>BUSHENYI</b>	2.68	0.67	-2.00	-1486	-75	-297
<b>WAKISO</b>	12.61	6.05	-6.56	-4866	-52	-973
<b>KAMPALA</b>	14.30	4.37	-9.93	-7364	-69	-1473

The Cumulative Equity gap (CEG) estimates the total number of student uptake opportunities gained or lost in public university educational opportunities by a district over the eight-year period. It refers to the share of uptake in the student population to which a district would have been entitled over the eight-year period if student allocation were proportional to population quota. Cumulative Equity Index (CEI) is expressed as CEG in percentage terms. It is the cumulative percentage estimate of student uptake opportunities gained or lost by a district over the eight-year period. The Average Equity Opportunities is estimated as the CEG, divided by eight academic years, to express the number of missed opportunities for public university education by a district per annum. Figure 5.5 below provides a summary of the top 20 districts with the highest average equity opportunity hence the most excluded districts from public university education in Uganda over this period:



**Figure 5.5: Number of missed public university educational opportunities in 20 districts with the largest public university educational gaps in Uganda**

86 districts (out of 112) accounted for 4 737 missed/lost public university educational

opportunities every year. From the perspective of the Fair Share Equity Framework, these equate to the number of missed opportunities for human capital investment in those districts annually. The majority – 70.6 per cent of the losses were incurred in 33 districts (representing 30 per cent of districts), of which 12 per cent were districts in Western Uganda, 24 per cent in the eastern and western regions respectively and 39 per cent in Northern Uganda. This implies that four out of 10 districts that incurred the largest equity losses and were most disadvantaged in welfare terms were in Northern Uganda. These were the districts with the highest percentage of missed opportunities for public university education each year from 2009 to 2017.

Among these, Yumbe district topped the list as the most excluded from public university education over the eight-year period. It incurred the greatest percentage of losses in uptake opportunities (1 461 per cent), equating to an average of 246 students each year. The 10 most excluded districts in cumulative percentage terms were Yumbe (1 461 per cent), Kotido (1 307 per cent), Buyende (901 per cent), Nwoya (838 per cent), Buvuma (775 per cent), Zombo (714 per cent), Kaabong (560 per cent), Kyegegwa (509 per cent), Otuke (503 per cent) and Amuria (492 per cent).

While the largest gains in student population were made by 23 per cent of the districts of the country, the largest losses went to 86 locations or districts, representing 77 per cent of the country's districts.

*If I was to take this in social investment terms,-----I would say that inequalities in the distribution of public university educational opportunities, would lead to inequality in development in those regions and districts in the long run---- because it creates gaps in human capital investments and human development. This has potential to cripple development, if not addressed. It implies that districts that have been left behind will continue to remain poor. Their welfare will get worse as individual and community productivity and ability to fight poverty will stagnate and decline in the long run (Maxwell, from personal interview).*

From the way participants responded, it was clear that disparities in the distribution of the student population was immediately equated with large losses in human capital investment,

welfare and development over the years and in the long run. This was seen to be the case, in districts such as Ntoroko, Moroto, Bulisa, Bulambuli, Yumbe, Kotido, Buyende, Zombo, Kabong, Kyegegwa, Amuria, Alebtong, Kyamkwanzu, Kiryandongo, Agago, Kole and Abim respectively. The majority of the above districts were located in Northern Uganda, where the most significant levels of disparities in the distribution of higher education were observed, and where the annual equity losses in student population, ranged from 2 in Lira to 202 in Yumbe. Although equity losses were higher in the majority of districts in Northern Uganda, and lower in districts in the east, west and central, there were a few notable exceptions. In Western Uganda, for instance, equity losses ranged from 246 to 105 in Kibaale, Kasese, Kamwenge, Kyegegwa and Kyenjojo districts.

### **5.3.5 Classification of districts into Equity Categories**

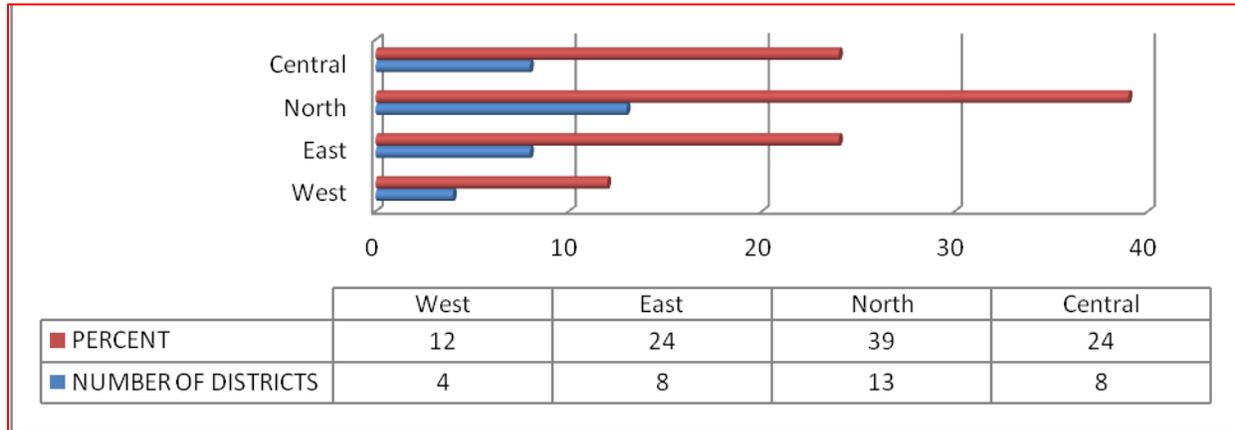
How does the social phenomenon compare from one region and district of Uganda to another?

Based on the values of Average Equity opportunities, districts were classified into three equity categories. The categories were based on values of CEI and were specific to locations. CEI is theorised to measure the potential existence of inter-group differences and inequalities among regions and districts of the country (McCall, 2005).

#### **5.3.5.1 Positive Equity Category**

Districts classified in the positive equity category were those with positive Average Equity Index (AEI) values. These were districts whose AEI values ranged from 31 to 246 points. The district value of the AEI represents the annual average number of missed opportunities in public university student population. Among districts in positive equity category, the proportions of student population allocated from 2009 to 2017 were less than the Fair Share Index or population quota. Nationally, two in every three districts (67 per cent) registered a positive Equity Share/Fair Share advantage. Positive Equity Share or Fair Share advantage measures uptake gains yet to be made by a district or region of the country in their public university student population, relative to their population quota. It is an estimate of the levels of inequity incurred by the district in the distribution of the student population in public universities over the years in question.

The highest positive values of AEI were recorded in 33 districts of Uganda, over the period 2009 to 2017. Figure 5.6 below shows the distribution of these districts by regions of Uganda:



**Figure 5.6: The proportional distribution of districts with the largest public university educational gaps in Uganda by region**

Districts, including Kibaale, Yumbe, Arua, Mubende, Kasese and Mayuge with larger positive Fair Share Gaps (AEO) were most excluded given their larger values of AEO, which represents the size of lost public university educational opportunities over the years, relative to their Fair Share Index. The bigger the Fair Share Gap (AEI value) in districts with positive equity values, the more excluded was the district from public university educational opportunities. In a group of 26 most excluded districts from public university education, equity advantage/gap ranged from 72 in Nebi district to 246 students in Kibaale each year. The largest equity advantage in this category of districts was recorded in Kibaale, with an average equity opportunity of 246 students. The 10 most excluded districts, based on the AEI values, were Kibaale (246), Yumbe (202), Arua (187), Mubende (173), Kasese (146), Mayuge (136), Buyende (128), Oyam (115), Kamwenge (111) and Kjenjojo (105). Figure 5.7 below identifies 26 districts with the highest AEO hence the most excluded districts with the largest annual losses in terms of public university educational opportunities recorded over this period:



**Figure 5.7: A list of the most excluded districts in public university education by the number of Average Equity Opportunities in public university education**

Over the eight years, Yumbe district had the largest Fair Share Gap. It incurred the greatest percentage losses in uptake opportunities (1 461 per cent), equating to an average of 246 students each year. The 10 districts with the largest cumulative percentage losses in welfare terms were Yumbe (1 461 per cent), Kotido (1 307 per cent), Buyende (901 per cent), Nwoya (838 per cent), Buvuma (775 per cent), Zombo (714 per cent), Kaabong (560 per cent), Kyegegwa (509 per cent), Otuke (503 per cent) and Amuria (496 per cent).

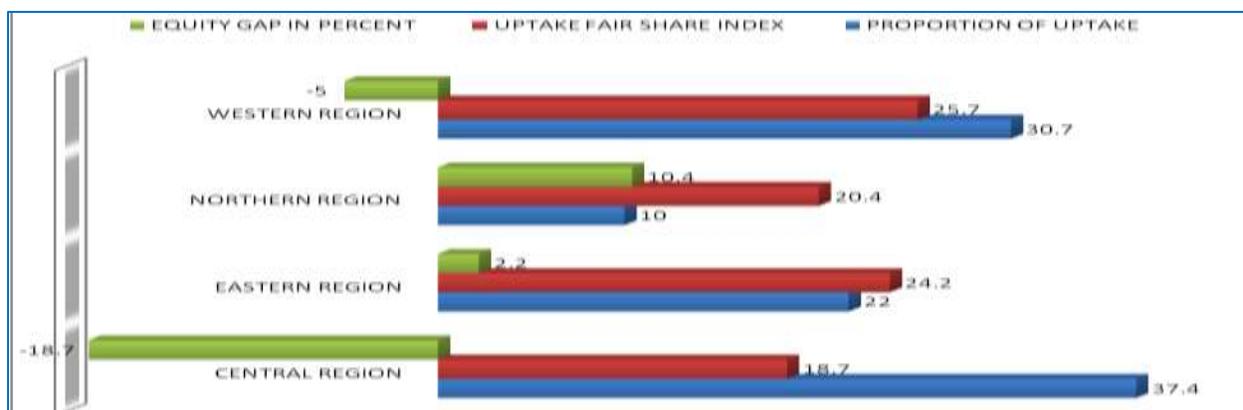
By implication, districts with the largest positive AEI incurred the largest welfare losses in terms of the potential of higher education in enhancing people’s abilities to fight poverty in the long term. The majority of these (39 per cent) were in Northern Uganda. These districts are structurally disadvantaged by these inequities and will remain poor as individual as well as community productivity and ability to rise above poverty stagnates as a result of the public university educational gap. Districts in the positive equity category were most disadvantaged in terms of the percentage of missed opportunities for public university education each year from 2009 to 2017. Given that the trend of inequality in higher education was apparent along geographic lines, the Fair Share Equity Framework demonstrates the importance of equity policies in the distribution of the benefits of development to ensure policy makers seek to integrate districts that lag behind in public policy.

### 5.3.5.2 Negative Equity Category

Negative equity category refers to districts whose AEI or Fair Share Gaps were negative. These were districts whose proportions of public university student population exceeded their Fair Share Index or population quota. Based on the concept of equity regulator, negative equity category was constituted by districts whose average equity opportunity value ranged from minus 31 to minus 1 473 annually. Fourteen per cent (15 out of 112) of districts in Uganda were classified in the negative equity category. Among these districts, the smallest negative AEI was negative 105. This was the minimum number of uptake gains made by a single district annually over and above its Fair Share Index and at the expense of districts in positive equity category. The biggest negative AEI or Fair Share Gap was 1 473 in Kampala. Negative equity category is a measure of equity gains in the student population, made by one region or district at the expense of another. It refers to gains made in the share of uptake over and above the average Fair Share Index (Population quota) of the region or district of the country.

Very large negative AEI values were found in a handful of districts in the central and western regions of the country, with Kampala, Wakiso, Bushenyi, Masaka, Mbarara, Rukungiri, Mpigi, Kabale, Ntungamo, Luwero, Mityana, Ibanda, Kiruhura and Sheema being the biggest beneficiaries. The share of negative equity appeared uncontrollably high – with the most dramatic gains among districts in Central Uganda with significant potential losses for Northern Uganda.

Northern Uganda was the region that consistently recorded the lowest number of uptakes, along with the East that showed modest levels of uptake losses over these years. The central and western regions of the country had the most striking negative equity trends. The two regions, reached a point where its negative equity share of 18.7 per cent rendered the entire country in a position of public university educational exclusion. This was particularly in the northern region, where levels of exclusion from public university educational opportunities were severe, with a total loss of 10.4 per cent of its fair share, compared to a loss of 2.2 per cent for the eastern region. Figure 5.8 below compares the proportion of uptake by region, with the uptake Fair Share Index and the Fair Share Gaps of regions, using 2016 population figures as a base year:



**Figure 5.8: Comparison between the proportion of public university student population (blue), Fair Share Index (red) and Fair Share Gap (green) in public university education in the four regions of Uganda**

As figure 5.7 illustrates, the most dominant negative Fair Share Gap was found in the central region (-18.7 per cent), followed by the West (-5 per cent). Of the 23 districts with the most excessive negative Fair Share Gap, 44 per cent were in the western region, 30 per cent in the central, and 13 per cent in the North and East respectively. Three districts in Central Uganda accounted for 67 per cent of excessive negative Fair Share Gap – Kampala (34 per cent), Wakiso (22 per cent) and Masaka (7 per cent). The rest of the districts were Bushenyi (7 per cent), Mukono (6 per cent), Mbarara (6 per cent), Rukungiri (4 per cent), Mpigi, Jinja, Kabaale and Ntungamo (3 per cent each) and Luwero (2 per cent). The proportions of positive Fair Share Gaps were more evenly distributed across 11 districts, with 15 per cent in Kibaale, Yumbe (12 per cent), Arua (11 per cent), Mubende (10 per cent), Kasese (9 per cent), Mayuge and Buyende (8 per cent each), Oyam, Kamwenge and Kyegegwa (7 per cent) and Kjenjojo (6 per cent). While 37 per cent of all positive equity shares were from Northern Uganda, 26 per cent was in the East, 24 per cent West and 13 per cent central. The only region that did not have a negative equity share was the North. Seventy-one per cent of all negative equity shares were in the central, 24 per cent in the West and 5 per cent in the East. Figure 5.9 below provides a further list of districts with the largest negative equity share over the period 2009 to 2017:



**Figure 5.9: List of districts with the largest negative equity average share/gap in public university education in Uganda**

Excessive fair share advantage was notable in a handful of districts in the central and western region. Kampala had the largest, with an advantage of 1 473 students in excess of its fair share of students annually, followed by Wakiso, Bushenyi, Masaka, Mukono, Mbarara, Rukungiri, Mpigi, Jinja, Kabale, Ntungamo and Luwero. While Bushenyi exceeded its fair share by 74 per cent, the excess percentage gains ranged from 69 per cent above Fair Share Index in Masaka, to 59 per cent in Rukungiri, 58 per cent in Mpigi, 56 per cent Mbarara, 52 per cent in Wakiso, 51 per cent in Mukono, 42 per cent in Jinja, 38 per cent in Mityana, 35 per cent in Kabale, Ntungamo and Luwero, 30 per cent Kapchorwa, 27 per cent in Ibanda and Sheema, 20 per cent in Kiruhura, 19 per cent in Kiboga, 17 per cent in Busia, 14 per cent in Kanungu, 10 per cent in Tororo and 9 per cent in Kabarole.

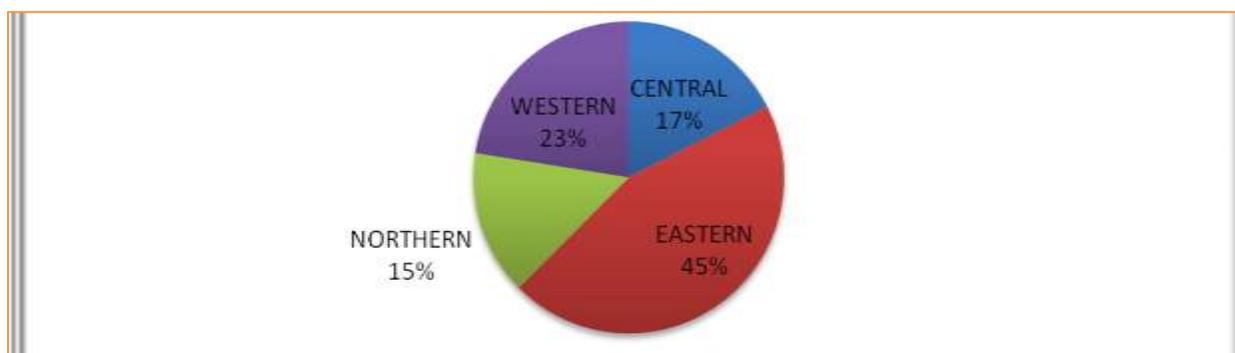
In summary, districts in Northern and Eastern Uganda recorded greater positive Fair Share Gaps. As a region, Northern Uganda missed more than half of its fair share of public university uptake opportunities over the period 2009 to 2017. With only 10 per cent of uptake, compared to a fair share of 20, 4 per cent, Northern Uganda suffered the biggest losses in human capital investment in social welfare terms. This was attributed to poverty and to the long and protracted period of

armed conflict, which ravaged northern Uganda for almost 20 years. According to interviews;

*There was no schooling in northern Uganda during this period. Most of the schooling infrastructure was destroyed. The entire education system was interrupted as schools were burnt down; children abducted and many conscripted as soldiers. For all those years, teachers who survived, along with their families and communities were forced to live in internally displaced people's camps. Unfortunately, conditions in those camps were too squalid for any learning to take place. There was no access to basic social services such as water and education. The war was devastating. It will take decades to rebuild the education system as an entire generation was lost (Mariana, from personal interview)*

### 5.3.5.3 Relative Equity Category

The third equity category was the relative equity category. This was used to classify districts that fell within an acceptable range, with an annual AEI ranging from zero to plus or minus 30. Relative equity was recorded in 19 per cent of all districts in Uganda. The largest relative equity share was found in Eastern Uganda. Figure 5.10 below, shows the percentage distribution of districts in the relative equity category by region:



**Figure 5.10: Percentage distribution of districts in the relative equity category**

The eastern region had 45 per cent of all districts with relative equity in the country, followed by the West (23 per cent), the central (17 per cent) and the North (15 per cent). It is important to note that the western region ranked second in the number of districts with negative and relative equity categories in the country respectively.

Districts with relative equity were those in which the distribution of public university educational opportunities was more evenly distributed. The higher the number of districts classified in the relative equity category by region, the lower the level of inequality in the distribution of public university educational opportunities among the districts in the region.

The regions with districts that were most excluded in terms of the distribution of public university educational opportunities in the country were those with the lowest number of districts in the relative equity category. Northern and central regions of Uganda had the lowest number of districts in relative equity category of 15 and 17 per cent respectively. This does not mean similarity at any level of complexity in the scale observed in the social phenomenon between the two regions. While inequality in the distribution of public university educational opportunities in Northern Uganda was extreme in most districts in the region, there was a stark difference between districts in the central region. Nine out of every 10 students from Northern Uganda who had access to public university educational opportunities over the eight-year period qualified from high schools located outside their region, relative to six out of 10 in Eastern Uganda and 10 out of 10 in Central Uganda.

## **5.4 Discussion**

In pursuit of articles 32(3) and 32(4) of the Constitution, the Equal Opportunities Commission Act (2007) was put in place to ensure that the State's constitutional mandate for equity and equality for all was implemented (Equal Opportunities Commission Act, 2007: 2-3). The Education Sector Strategic Plan 2007-2015 and 2017/18-2019/2020, set the goal for the country to increase equitable access to quality education (MoES 2007; 2017) in order to transform the country. The Strategic Plan for Universal Secondary Education 2009-2014 aimed to increase and improve equitable access to quality secondary education. The 2009 and 2016, Gender in Education Policy framework seeks to enhance equity. The 2011 Basic Education Policy for the disadvantaged sought to address the issue of exclusion. What is required is for the country to align policy with practice to achieve the goal of democratising secondary and higher education. This is a vital priority for Uganda for human development and welfare.

It appears that the focus of Uganda's public university educational distribution system was not

about equity, equality and social justice. Rather, it was about competition to reward the top students. This appeared to be at the expense of those equally gifted and hardworking students, the majority of whom ail from underprivileged schools located in disadvantaged areas and districts of the country. These were areas in which the quality of primary and secondary schooling was too poor to provide incentives for higher education. As the study showed, the distribution pattern of public university educational opportunities was regionally distinct, with two regions of the country accounting for over two-thirds of the entire student population in public universities in Uganda from 2009 to 2017. The merit-based policies, systems and practices responsible for the distribution of public university educational opportunities was singled out by participants as the reason that explains the growing inequality in the distribution of the student population across regions and districts of Uganda. Out of 4 000 opportunities available for public sponsorship each year, the merit based policies and systems of governance were responsible for the distribution of 75 per cent. Only a quarter (25 per cent) of all public university educational opportunities was distributed through a district population quota-based policy and system of governance.

Significant opportunities to advance the goal of equity in public university education were lost in the most educationally excluded districts of the country. The majority of districts that incurred the largest equity losses in public university education were mainly in Northern Uganda. In total, Northern Uganda received 11 per cent (54 per cent of its fair share) over the eight-year period, compared to 22 per cent for the eastern region. Eighty-six districts (out of 112) accounted for a total of 4 737 missed/lost public university educational opportunities every year. The majority – 70.6 per cent of losses were incurred in 33 districts (representing 30 per cent of districts), of which 12 per cent were districts in Western Uganda, 24 per cent in the eastern and western regions respectively and 39 per cent in Northern Uganda. The 10 most marginalised districts in terms of loss in student population in cumulative percentage terms were Yumbe (1 461 per cent), Kotido (1 307 per cent), Buyende (901 per cent), Nwoya (838 per cent), Buvuma (775 per cent), Zombo (714 per cent), Kaabong (560 per cent), Kyegegwa (509 per cent), Otuke (503 per cent) and Amuria (469 per cent).

While the largest gains were made by 23 per cent of the districts of the country, the largest losses

went to 86 districts, representing 77 per cent of the country's districts. This inequality makes districts that are structurally poor remain poor, while individual as well as community productivity and the ability to rise above poverty stagnate. It impedes the long-term benefits of higher education in enhancing the country's ability to fight poverty, without leaving any district behind or to the detriment of other districts.

The distribution policy and systems did not work for students from underprivileged schools located in remote districts of Uganda. This is in spite of the introduction of the 25 per cent district quota-based policy for public university admission in 2005. Concerns that the policy of national merit was discriminatory towards students who write their national exams in remote districts of the country were raised and identified as an issue that has not yet been addressed. The 25 per cent quota system has not made the distribution system any fairer for students from remote districts of Uganda. It has not made it any fairer for students from any district to gain access to quality public university education without discrimination.

Over the eight years, inequality in the distribution of public university educational opportunities in Uganda became more apparent along geographical and district lines. While the number of students enrolled increased significantly, the distribution of the student population did not reflect the population quota or Fair Share Index of regions and districts of Uganda. Uganda's public university educational distribution system is rooted in an exclusive model of meritocracy, characterised by a strong bias towards educating the elite, in a world where rapid social and technological change affects not only the elite, but also the masses and the universal. This constricts Uganda's ability to liberate itself from elite to mass and universal stages of higher education. There is no policy framework that aims to ensure the country achieves the participation of at least 50 per cent of the relevant population cohort in higher education in spite of the existence of universal primary and secondary education policies.

A transition from elite to mass and universal stages for higher education requires policy frameworks that clearly state the goal to ensure that at least 50 per cent of each subsequent generation is enrolled in some form of tertiary education. At least half of the 19 year olds in any year should be allowed to enter some type of tertiary education and training. Owing to demographic trends in which over 78 per cent of the country's population is below 30 years of

age, higher education policies must portray the true nature of the demand for education and training. In this context;

*The government needs to consider the issue of enrolment quotas. Quotas must now constitute an important variable if we are to develop an equitable secondary and higher education system for the whole country. Our policies and systems must be amended so that we can democratize our secondary and higher education system. (Levi, from interviews)*

The study demonstrates that the absence of Fair Share consideration in the distribution practices is a major structural setback for equity. Perhaps more than at any time in history, there is need to respond to the governance issues that hinder the potential of higher education as a driver of development, particularly in the context of the role of higher education in a global knowledge economy. Equity and equality is an important strategy to improve social welfare in the end, without making anyone else worse off. It is actually preferred to the redistribution of assets. It is a win-win public policy approach to overcome injustices in the distribution of the benefits of development, promote social mobility and eliminate poverty.

## **5.5 Conclusion**

The distribution of public university educational opportunities in Uganda was characterised by significant differences between Fair Share and actual allocations in regions and districts. While the country experienced significant growth in the higher education subsector, levels of inequality in its distribution among regions and districts were significant. High numbers of enrolment did not translate into equity across regions and districts because the benefit of growth in higher education mainly went to those districts at the top. By 2017, while the bottom 80 per cent of districts controlled 9.5 per cent, the top 20 per cent controlled 90.5 per cent of all public university educational opportunities. The largest share of Uganda's public university student population of 68 per cent was recorded in the central and the western regions of the country. This implies that decisions on allocation were not effectively related to the district population quota-based policy and system of governance and the importance of equity in the distribution of higher education educational opportunities as a key resource for poverty eradication within the Ugandan society.

Article 21 of the 1995 Constitution of Uganda enshrines the principles of equality and non-discrimination of all persons in all aspects of public life. Article 32 spells out the right to Affirmative Action for disadvantaged groups. This provision requires the state to address disadvantages associated with past and present policies, systems and practices of distribution to enhance equity in education and opportunities and ensure public institutions, such as universities and public service, reflect the national character and demographic dynamics of the country. The next chapter examines the meaning, function and implications of location on the distribution policies and systems of public university education in Uganda. The chapter builds on the concept of Equity Distance (ED) to examine if and how students' district of origin matters in Uganda's public university educational distribution system. It assesses the potential benefits which access to the top high schools may provide to epistemic groups in the context of the national merit policies, systems and practices of the public university educational distribution system in regions and districts of Uganda.

## **CHAPTER SIX**

# **THE DISTRICT FACTOR AND THE DISTRIBUTION OF PUBLIC UNIVERSITY EDUCATION IN UGANDA**

Does student's district of origin matter in Uganda's public university educational distribution system?

### **6.1 Introduction**

Based on the Fair Share Equity Framework elaborated in Chapter 5, Chapter 6 builds on the concept of Equity Distance (ED) and Equity Index of districts in public university education, to examine if and how students' district of origin matters in Uganda's public university educational distribution system. It introduces the concepts of Equity Distance and Equity Distance Index of districts in public university education. The concept of the Equity Index was coined to estimate the social distance or location of districts to public university education – the degree of relative ease or difficulty in access to public university educational opportunities from one district of the country to another based on the feminist discourse of social location of the feminist Standpoint Theory (Intemann, 2010; Mamo, 2005). It applies the inter-categorical approach (McCall, 2005: 1784-85) to focus on comparative multi-group analyses and investigation of the social phenomenon of inequality among already constituted groups (Jayadev & Reddy, 2011) of districts to draw special attention to those in privileged and those in subordinate positions in the context of the public university educational distribution system.

The chapter demonstrates how location systematically shaped and limited access to public university educational opportunities in Uganda. It identifies the category of districts that drove the public university educational distribution system, addressing the question of winners and losers and ascertaining the nature of districts for which the distribution system was effective or harmful. The chapter stands out for its emerging perspectives on 'Equity Distance' as a measure of inequality to advance the feminist Standpoint empiricism on the role of location in the understanding of how geographical forms of inequality in the distribution of education is reproduced.

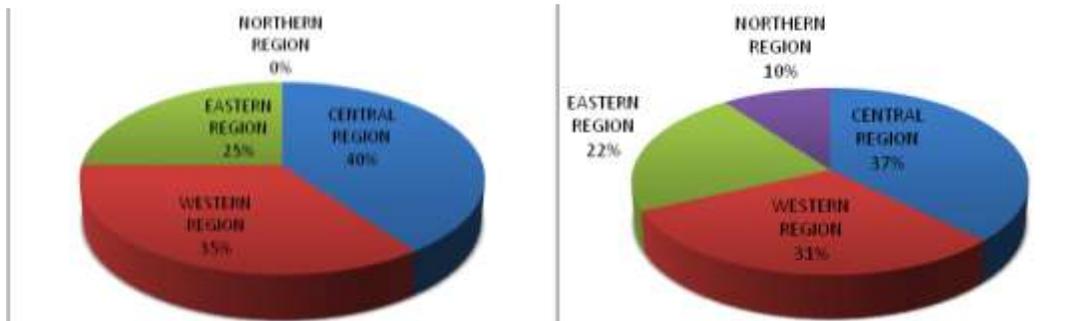
## 6.2 Equity Distance approach

To determine the Equity Distance of districts to public university educational opportunities, a national and regional ranking of districts by their public university student population was carried out. The Equity Distance (ED) was estimated as the difference between national rank A and regional rank B in public university student population for each of the 112 districts of Uganda. According to Intemann, “[s]ocial location systematically shapes and limits knowledge production and access to resources from a particular Standpoint” (Intemann, 2010: 783). In the light of the feminist Standpoint theory above, the concept of Equity Distance was coined as a measure of the discourse of social location, to assess the potential role that each of the 112 districts of Uganda plays as a particular ‘Standpoint’ in access to public university educational opportunities in the country. In step one of the methodology, districts were ranked in the order of their public university student population admitted from each over the period 2009-2017. Based on the ranking exercise, each of the 112 districts was assigned a national and regional rank respectively based on the order of the student population admitted to public universities. The district’s rank is a measure of the social location or position of each district, in the public university educational distribution system. While the national rank reflects the district’s national position in the public university educational distribution system, the regional rank shows the social position or location of the district in the region. The two ranks are a measure of how significant the district is, in the public university educational distribution system, either at national or regional level. It is a way to illustrate and bring to light the notion of social location and social position embedded in the feminist Standpoint empiricism. According to the Feminist Standpoint theory, access to resources such as higher educational opportunities is “grounded in historical socio-economic context and varies according to “particular Standpoints” (Mamo, 2005: 358). In the Standpoint Theory, location matters as a factor in knowledge production and access to resources. The theory embeds the notion that social location offers the benefit of access to resources to epistemic groups in particular locations. A particular location may facilitate some, while inhibiting access for others. This potential benefit of access grounded in location is what is referred to as “epistemic advantage” and is theorised, according to Intemann (2010) as specific to “particular Standpoints or context” (Intemann, 2010: 784).

### 6.3 Location and the distribution of public university education

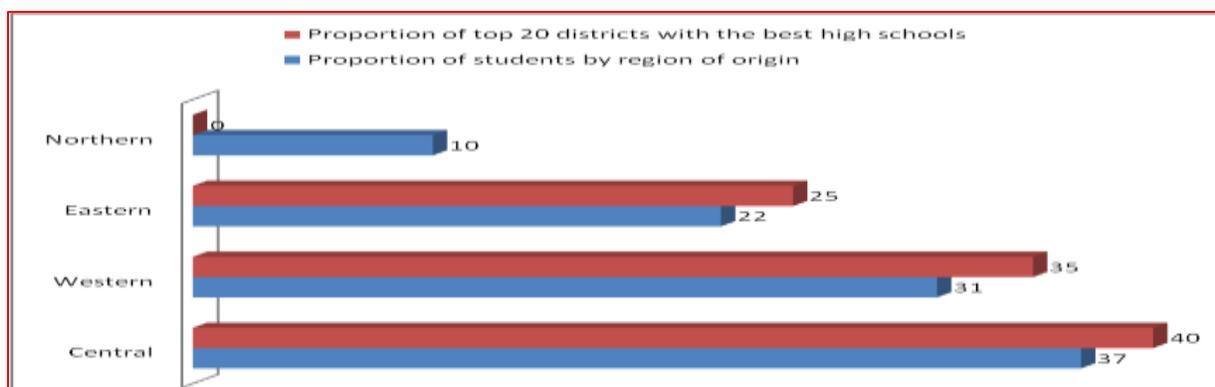
How does location influence equity and the distribution of the social phenomenon in regions and districts of Uganda?

A sample of 101 504 students enrolled in five public universities in Uganda from 2009 to 2018 and from 112 districts of Uganda was used as the main source of knowledge to assess the distribution of public university student population by region and district. Figure 6.1 below compares the proportions of the distribution of public university student population by region of origin and by region of location of districts of students' high schools, using data from the leading 20 districts in public university student population:



**Figure 6.1: Comparison between the proportions of the distribution of public university students population by region of origin and region of location of district of students' high schools**

The theoretical significance of assessing the distribution of public university student population by region and district of origin is based on the Feminist Standpoint Theory. It is aimed at examining the potential meaning, functions and implications of the discourse of social location (student's districts of origin) to access to public university educational opportunities as a resource. Figure 6.2 below shows a comparison between the proportions of the distribution of public university student's population by region of student origin versus the proportions of the top 20 districts where the best high schools for student qualification were located:



**Figure 6.2: Comparison between the percentage proportions of the distribution of the student population by region of origin versus region of location of 20 districts where the best high schools are located**

**The empirical significance of region and district of origin in the distribution of public university student population**

By region of origin, the majority of the student population (68 per cent) was from the two regions of central and western Uganda. According to interviews;

*the central and western regions of Uganda are the regions of the country where the majority of districts with the top performing high schools in national entry examinations are located (Yoel, from interviews).*

The above perception was confirmed by regional and district level data analysis, which showed that the two regions accounted for the majority (75 per cent) of districts where the best high schools for student qualification for admission were located.

The above finding demonstrates that location matters. It proves the relevance of the feminist Standpoint theory that it is “one’s social location that affords him or her multifaceted access to social phenomenon” (Mamo, 2005: 358). It also confirms the reality of the feminist Standpoint empiricist’s notion that social location systematically shapes and limits knowledge production and access to resources from a particular Standpoint, especially in the absence of social equilibrium or equity measures to address the question of whether or not location matters. According to Intemann, “[s]ocial location

*systematically shapes and limits knowledge production and access to resources from a particular Standpoint” (Intemann, 2010: 783).*

Table 6.1 below provides a cumulative summary of the percentage distribution of public university student population allocated to each of the 112 districts of Uganda from 2009 to 2017:

**Table 6.1: Distribution of public university students by gender and district from 2009 to 2017**

DISTRICT	MALE	FEMALE	TOTAL	MALE PER CENT OF TOTAL	FEMALE PER CENT OF TOTAL	PER CENT OF TOTAL
KAMPALA	15540	15344	30884	29.9	31.0	30.4
WAKISO	10010	10453	20463	19.3	21.1	20.2
MUKONO	4166	4095	8261	8.0	8.3	8.1
LUWEERO	2052	2154	4206	3.9	4.3	4.1
BUSHENYI	1581	2229	3810	3.0	4.5	3.8
MPIGI	1605	1778	3383	3.1	3.6	3.3
JINJA	1796	1129	2925	3.5	2.3	2.9
MBARARA	1677	997	2674	3.2	2.0	2.6
MASAKA	1309	980	2289	2.5	2.0	2.3
BUIKWE	1121	1001	2122	2.2	2.0	2.1
MITYANA	908	798	1706	1.7	1.6	1.7
KABALE	960	632	1592	1.8	1.3	1.6
RUKUNGIRI	372	944	1316	0.7	1.9	1.3
KAYUNGA	592	612	1204	1.1	1.2	1.2
NTUNGAMO	749	360	1109	1.4	0.7	1.1
HOIMA	607	432	1039	1.2	0.9	1.0
TORORO	508	445	953	1.0	0.9	0.9
IGANGA	492	441	933	0.9	0.9	0.9
MPALE	535	376	911	1.0	0.8	0.9
IBANDA	253	386	639	0.5	0.8	0.6
KABAROLE	291	291	582	0.6	0.6	0.6
SOROTI	369	128	497	0.7	0.3	0.5
RAKAI	221	190	411	0.4	0.4	0.4
ARUA	197	149	346	0.4	0.3	0.3
KASESE	154	182	336	0.3	0.4	0.3

KAMWENGE	218	113	331	0.4	0.2	0.3
NAKASEKE	187	132	319	0.4	0.3	0.3
LIRA	196	118	314	0.4	0.2	0.3
SHEEMA	186	108	294	0.4	0.2	0.3
MASINDI	191	97	288	0.4	0.2	0.3
KAMULI	183	101	284	0.4	0.2	0.3
BUSIA	140	123	263	0.3	0.2	0.3
KANUNGU	143	114	257	0.3	0.2	0.3
MUBENDE	131	111	242	0.3	0.2	0.2
KALUNGU	121	113	234	0.2	0.2	0.2
NGORA	122	95	217	0.2	0.2	0.2
KIBAALE	119	80	199	0.2	0.2	0.2
KISORO	97	101	198	0.2	0.2	0.2
GULU	114	76	190	0.2	0.2	0.2
KALIRO	83	101	184	0.2	0.2	0.2
PALLISA	101	71	172	0.2	0.1	0.2
BUTAMBALA	75	97	172	0.1	0.2	0.2
NAKASONGOLA	84	68	152	0.2	0.1	0.1
MAYUGE	83	65	148	0.2	0.1	0.1
KIBOGA	81	65	146	0.2	0.1	0.1
KIRYANDONGO	76	46	122	0.1	0.1	0.1
KIRUHURA	64	51	115	0.1	0.1	0.1
MITOOMA	77	38	115	0.1	0.1	0.1
NAMUTUMBA	67	47	114	0.1	0.1	0.1
KAPCHORWA	52	45	97	0.1	0.1	0.1
LYANTONDE	59	27	86	0.1	0.1	0.1
ISINGIRO	15	70	85	0.0	0.1	0.1
KOLE	11	71	82	0.0	0.1	0.1
BUTALEJA	45	36	81	0.1	0.1	0.1
KALANGALA	36	41	77	0.1	0.1	0.1
NWOYA	44	27	71	0.1	0.1	0.1
BUDAKA	15	55	70	0.0	0.1	0.1
BUKWO	38	32	70	0.1	0.1	0.1
KITGUM	33	30	63	0.1	0.1	0.1
MOROTO	44	19	63	0.1	0.0	0.1
APAC	40	22	62	0.1	0.0	0.1
BUNDIBUGYO	15	47	62	0.0	0.1	0.1

MANAFWA	31	30	61	0.1	0.1	0.1
LWENGO	30	25	55	0.1	0.1	0.1
BUGIRI	35	19	54	0.1	0.0	0.1
KYEJOJO	36	18	54	0.1	0.0	0.1
NEBBI	33	19	52	0.1	0.0	0.1
SIRONKO	25	24	49	0.0	0.0	0.0
NAPAK	0	31	31	0.0	0.1	0.0
OTUKE	18	13	31	0.0	0.0	0.0
KOBOKO	25	5	30	0.0	0.0	0.0
KAGADI	16	14	30	0.0	0.0	0.0
MARACHA	20	9	29	0.0	0.0	0.0
BUKOMANSIMBI	18	9	27	0.0	0.0	0.0
MOYO	12	13	25	0.0	0.0	0.0
KOTIDO	16	8	24	0.0	0.0	0.0
BUKEDEA	20	4	24	0.0	0.0	0.0
KAABONG	12	10	22	0.0	0.0	0.0
KUMI	8	14	22	0.0	0.0	0.0
GOMBA	7	14	21	0.0	0.0	0.0
ADJUMANI	11	9	20	0.0	0.0	0.0
AMURIA	9	9	18	0.0	0.0	0.0
KIBUKU	13	5	18	0.0	0.0	0.0
SEMBABULE	8	10	18	0.0	0.0	0.0
BUDUDA	9	6	15	0.0	0.0	0.0
KWEEN	8	7	15	0.0	0.0	0.0
KAKUMIRO	5	10	15	0.0	0.0	0.0
KABERAMAIDO	11	3	14	0.0	0.0	0.0
AMURU	5	8	13	0.0	0.0	0.0
ABIM	5	7	12	0.0	0.0	0.0
YUMBE	11	1	12	0.0	0.0	0.0
PAIDAH	8	3	11	0.0	0.0	0.0
AMOLATAR	7	3	10	0.0	0.0	0.0
KYEGEGWA	4	6	10	0.0	0.0	0.0
LUUKA	6	3	9	0.0	0.0	0.0
ALEBTONG	3	4	7	0.0	0.0	0.0
DOKOLO	5	2	7	0.0	0.0	0.0
ZOMBO	4	3	7	0.0	0.0	0.0
BULIISA	6	1	7	0.0	0.0	0.0

BUHWEJU	6	0	6	0.0	0.0	0.0
PADER	2	3	5	0.0	0.0	0.0
RUBIRIZI	2	3	5	0.0	0.0	0.0
LAMWO	2	2	4	0.0	0.0	0.0
KATAKWI	2	2	4	0.0	0.0	0.0
SERERE	1	3	4	0.0	0.0	0.0
AMUDAT	2	1	3	0.0	0.0	0.0
BUYENDE	2	1	3	0.0	0.0	0.0
AGAGO	1	1	2	0.0	0.0	0.0
PAKWACH	2	0	2	0.0	0.0	0.0
BULAMBULI	2	0	2	0.0	0.0	0.0
KYANKWANZI	1	0	1	0.0	0.0	0.0
<b>TOTAL</b>	<b>51 976</b>	<b>49 574</b>	<b>101 550</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 6.1 above shows that the distribution of student population in Uganda was concentrated in a few locations or districts of the country. Twenty out of 112 districts accounted for 90.5 per cent of the total student population. By 2017, while the bottom 40 per cent of districts controlled 0.2 per cent of the student population, the top 20 per cent controlled 90.5 per cent of all public university educational opportunities.

#### **6.4 Social position of districts in public university distribution system**

Based on variations observed in public university student population by district of origin and district of high school location, districts were ranked in their order of student population to establish their social position or place in the public university educational distribution system. The concept of the district's social position was used to refer to the significance of each district in the public university educational distribution system due to its location in the context of the public university educational distribution system. Table 6.2 below provides a summary of the national and regional order of ranks of 112 districts of Uganda by their public university student population. The table illustrates the variations in social position of district based on student population and the significance of each district in the public university educational distribution system:

**Table 6.2: Regional and national ranks of districts of Uganda by public university student population 2009 to 2017**

<b>NORTHERN UGANDA DISTRICTS</b>					
<b>DISTRICT</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>NATIONAL RANK</b>	<b>REGIONAL RANK</b>
ARUA	197	149	346	25	1
LIRA	196	118	314	29	2
GULU	114	76	190	40	3
KOLE	11	71	82	55	4
NWOYA	44	27	71	58	5
KITGUM	33	30	63	61	6
MOROTO	44	19	63	62	7
APAC	40	22	62	63	8
NEBBI	33	19	52	69	9
NAPAK	0	31	31	71	10
OTUKE	18	13	31	72	11
KOBOKO	25	5	30	74	12
MARACHA	20	9	29	75	13
MOYO	12	13	25	77	14
KOTIDO	16	8	24	79	15
KAABONG	12	10	22	80	16
ADJUMANI	11	9	20	83	17
AMURIA	9	9	18	84	18
AMURU	5	8	13	91	19
ABIM	5	7	12	92	20
YUMBE	11	1	12	93	21
PAIDAH	8	3	11	94	22
AMOLATAR	7	3	10	95	23
ALEBTONG	3	4	7	98	24
DOKOLO	5	2	7	100	25
ZOMBO	4	3	7	101	26
PADER	2	3	5	103	27
LAMWO	2	2	4	106	28
AMUDAT	2	1	3	108	29
AGAGO	1	1	2	110	30
PAKWACH	2	0	2	112	31
<b>EASTERN UGANDA DISTRICTS</b>					
<b>DISTRICT</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>NATIONAL RANK</b>	<b>REGIONAL RANK</b>
JINJA	1796	1129	2925	7	1

TORORO	508	445	953	17	3
IGANGA	492	441	933	18	4
MBALE	535	376	911	19	5
SOROTI	369	128	497	23	6
KAMULI	183	101	284	32	7
BUSIA	140	123	263	33	8
KALUNGU	121	113	234	36	9
NGORA	122	95	217	37	10
KALIRO	83	101	184	41	11
PALLISA	101	71	172	44	12
MAYUGE	83	65	148	46	13
NAMUTUMBA	67	47	114	51	14
KAPCHORWA	52	45	97	52	15
BUTALEJA	45	36	81	56	16
BUDAKA	15	55	70	59	17
BUKWO	38	32	70	60	18
MANAFWA	31	30	61	65	19
BUGIRI	35	19	54	67	20
SIRONKO	25	24	49	70	21
BUKEDEA	20	4	24	78	22
KUMI	8	14	22	81	23
KIBUKU	13	5	18	85	24
BUDUDA	9	6	15	87	25
KWEEN	8	7	15	89	26
KABERAMAIDO	11	3	14	90	27
LUUKA	6	3	9	97	28
BUHWEJU	6	0	6	102	29
KATAKWI	2	2	4	105	30
SERERE	1	3	4	107	31
BUYENDE	2	1	3	109	32
BULAMBULI	2	0	2	111	33
<b>WESTERN UGANDA DISTRICTS</b>					
<b>DISTRICT</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>NATIONAL RANK</b>	<b>REGIONAL RANK</b>
BUSHENYI	1581	2229	3810	5	1
MBARARA	1677	997	2674	8	2
KABALE	960	632	1592	12	3
RUKUNGIRI	372	944	1316	13	4
NTUNGAMO	749	360	1109	15	5
HOIMA	607	432	1039	16	6

IBANDA	253	386	639	21	7
KABAROLE	291	291	582	22	8
KASESE	154	182	336	26	9
KAMWENGE	218	113	331	27	10
SHEEMA	186	108	294	30	11
MASINDI	191	97	288	31	12
KANUNGU	143	114	257	34	13
KIBAALE	119	80	199	38	14
KISORO	97	101	198	39	15
KIRYANDONGO	76	46	122	48	16
KIRUHURA	64	51	115	49	17
MITOOMA	77	38	115	50	18
ISINGIRO	15	70	85	54	19
BUNDIBUGYO	15	47	62	64	20
KYEJOJO	36	18	54	68	21
KAGADI	16	14	30	73	22
KAKUMIRO	5	10	15	88	23
KYEGEGWA	4	6	10	96	24
BULIISA	6	1	7	99	25
RUBIRIZI	2	3	5	104	26
<b>CENTRAL UGANDA DISTRICTS</b>					
<b>DISTRICT</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>NATIONAL RANK</b>	<b>REGIONAL RANK</b>
KAMPALA	15540	15344	30884	1	1
WAKISO	10010	10453	20463	2	2
MUKONO	4166	4095	8261	3	3
LUWEERO	2052	2154	4206	4	4
MPIGI	1605	1778	3383	6	5
MASAKA	1309	980	2289	9	6
BUIKWE	1121	1001	2122	10	7
MITYANA	908	798	1706	11	8
KAYUNGA	592	612	1204	14	9
RAKAI	221	190	411	24	10
NAKASEKE	187	132	319	28	11
MUBENDE	131	111	242	35	12
BUTAMBALA	75	97	172	43	13
NAKASONGOLA	84	68	152	45	14
KIBOGA	81	65	146	47	15
LYANTONDE	59	27	86	53	16
KALANGALA	36	41	77	57	17

LWENGO	30	25	55	66	18
BUKOMANSIMBI	18	9	27	76	19
GOMBA	7	14	21	82	20
SEMBABULE	8	10	18	86	21
KYANKWANZI	1	0	1	113	22

Altogether 90.5 per cent of the total student population from 2009 to 2017 qualified from 22 locations or districts. This represents 20 per cent of the 112 districts of Uganda. Forty per cent of the leading 20 districts in student population were located in the central region, 35 in the west, 25 in the east and none in Northern Uganda. For every 100 students, 91 of them qualified from high schools located in the following top 20 districts: Kampala (30.1 per cent), Wakiso (20 per cent), Mukono (8.1 per cent), Luwero (4.1 per cent), Bushenyi (3.7 per cent), Mpigi (3.3 per cent), Jinja (2.9 per cent), Mbarara (2.6 per cent), Masaka (2.2 per cent), Buikwe (2.1 per cent), Mityana (1.7 per cent), Kabale (1.6 per cent), Rukungiri (1.3 per cent), Kayunga (1.2 per cent), Ntungamo (1.1 per cent), Hoima (1.0 per cent), Tororo (0.9 per cent), Iganga (0.9 per cent), Mbale (0.9 per cent) and Ibanda (0.6 per cent). This demonstrates a strong link between districts with the highest proportions of student population and those in which the best secondary schools are located.

Districts that ranked highest in student population nationally and regionally were the most influential in the public university admission system. These included Kampala, which ranked 1<sup>st</sup> both nationally in Uganda and regionally in Central Uganda, Arua, which ranked 1<sup>st</sup> in Northern Uganda and 25<sup>th</sup> nationally, Jinja 1<sup>st</sup> in the East and 7<sup>th</sup> nationally and Bushenyi 1<sup>st</sup> in the West and 5<sup>th</sup> nationally. While the leading districts in Central, West and East ranked from 1<sup>st</sup> to 7<sup>th</sup> position nationally, Arua, the best district in Northern Uganda was ranked in the 25<sup>th</sup> place nationally. This demonstrates significant levels of inequality in the distribution of student population among the leading districts and between districts at the top and those at the bottom of the distribution system respectively. The wide variations in ranks between the three regions of the Central, Western and Eastern Uganda versus Northern Uganda portray some similarities in the levels of relative ease in the three regions, on one hand, and the level of relative difficulty of access to public university educational opportunities from Northern Uganda, on the other. To illustrate this point, Table 6.3 below provides a summary of Northern Uganda's districts with

their respective regional and national ranks in student population:

**Table 6.3: Regional and national ranking of districts of Northern Uganda by student population**

DISTRICT	MALE	FEMALE	TOTAL	NATIONAL RANK	REGIONAL RANK
ARUA	197	149	346	25	1
LIRA	196	118	314	29	2
GULU	114	76	190	40	3
KOLE	11	71	82	55	4
NWOYA	44	27	71	58	5
KITGUM	33	30	63	61	6
MOROTO	44	19	63	62	7
APAC	40	22	62	63	8
NEBBI	33	19	52	69	9
NAPAK	0	31	31	71	10
OTUKE	18	13	31	72	11
KOBOKO	25	5	30	74	12
MARACHA	20	9	29	75	13
MOYO	12	13	25	77	14
KOTIDO	16	8	24	79	15
KAABONG	12	10	22	80	16
ADJUMANI	11	9	20	83	17
AMURIA	9	9	18	84	18
AMURU	5	8	13	91	19
ABIM	5	7	12	92	20
YUMBE	11	1	12	93	21
PAIDAH	8	3	11	94	22
AMOLATAR	7	3	10	95	23
ALEBTONG	3	4	7	98	24
DOKOLO	5	2	7	100	25
ZOMBO	4	3	7	101	26
PADER	2	3	5	103	27
LAMWO	2	2	4	106	28
AMUDAT	2	1	3	108	29
AGAGO	1	1	2	110	30
PAKWACH	2	0	2	112	31

There were wide variations observed between the national and regional ranks of the 31 districts

in Northern Uganda, without exception. Only two – 6.5 per cent (out of 31) districts in Northern Uganda ranked among the leading 30 districts in student population nationally. The two districts were Arua and Lira, at 25<sup>th</sup> and 29<sup>th</sup> places respectively, compared to six districts (19 per cent) in the eastern region, 11 (42 per cent) in Western Uganda and 10 (48 per cent) in Central Uganda. In Northern Uganda where the lowest ranked districts are, student population ranged from two in Pakwach to 346 in Arua over the eight-year period, in comparison to Eastern Uganda, with two students in Bulambuli and 2 122 in Jinja. In the western and central regions, the number of students ranged from 104 in Rubirizi district to 3 810 in Bushenyi, and from 113 in Kyamkwanzi district to 30 884 in Kampala.

The distribution of public university student population was visibly concentrated along district lines. When asked to substantiate for why there were significant geographical variations in the student population, one respondent noted, saying that;

*The district code and the high school factors do matter significantly. We have a few top high schools for a few people in the country. However, these are located in a few top districts of the country. Their access is also limited to the well to do sections of the population. This makes the admission system work in favour of students who come from such high schools and locations. It therefore favors the privileged and not the disadvantaged. This is the case given the nature of resource constraints faced in the provision of quality primary and secondary education in most districts in the country. Because of poor quality schooling in most rural areas, students disadvantaged by poor quality schooling in those areas cannot compete in the national examination system fairly. Yet these examinations are the basis for the national merit selection process for undergraduate programmes. The whole system is designed to favour students from better-resourced secondary schools, who often dominate the national examinations system (Easy-not real name), from interviews)*

To verify this claim, district level data analysis was undertaken. For every 100 public university educational opportunities distributed from 2009 to 2017, 50 of the beneficiaries were students who qualified from high schools located in the two districts of Kampala (30) and Wakiso (20). Ninety point nine per cent of the total public university student population of 93 231 qualified

from high schools located in 20 districts (17.5 per cent). Of the 20 districts, 40 per cent were in the central region, 35 in the west, and 25 in the east and none in Northern Uganda. Only nine per cent of the student population qualified from the rest (89 per cent) of the districts of the country. This implies a narrow base of location in Uganda's public university educational distributional system and highlights the dominant role of the district factor or code in the public university educational distribution system.

The above results clearly showed that location afforded "*multifaceted access to social phenomenon*" to students depending on their districts of origin and district of high school location (Mamo, 2005: 358). It shows that there is a clear link between location and access to public university educational opportunities in Uganda. This demonstrates why policies that take location factors into account matters for equity and equality in higher education in the context of Uganda. The findings provide proof of the significance of the feminist Standpoint empiricist's theory of social location to this study, more so, the reality of notion that social location provides epistemic advantage that is specific to the location of the epistemic agents (Intemann, 2010). This was the case as far as knowledge production and access to public university education as a resource in regions and districts of Uganda was concern

Location of the region and district of the country was therefore a key factor of public university educational inequality in Uganda. As a result, Uganda's public university educational distribution system appeared to have evolved away from the majority of the districts, thus displacing the collective benefits of quality education from the rural to urban areas. The perception from interviews clearly showed that this was the case as resources for implementing the public education system have been critically low. When asked to substantiate, it was explained that;

*the logistical difficulty involved include the lack of educational inputs and outputs in disadvantaged school—the lack of money to hire and retain qualified and experienced teachers and provide the books and the technologies required to uplift the quality of learning in poor rural areas (Michelle, from interviews).*

These were also the reasons advanced by participants to explain the binary Equity Gap between

rural and urban districts in the public university student population and the staggering levels of public university educational gaps observed between districts in the lower equity clusters across the country. The above perception was in congruent to what regional and district level analysis of statistics revealed. Only 10 per cent of the student population originated from the districts in Northern Uganda. There was no single district in the northern region among the leading top 20 districts in student population. This implies that the majority of the student population from Northern Uganda qualified from high schools located outside their region. This finding is consistent with the earlier finding, which showed that, of the 10 per cent of student population in the country whose home districts were in the northern region, nine out of every 10 qualified from high schools located outside the region. The narrow district base of the student population that qualified from poor remote districts was related to the notion of the national merit system of distribution. In the perceptions of participants, it is the absence of consideration for the notion of equity in the national merit system that defines inequality in the distribution system of public university education in Uganda.

*The system relies too heavily on districts at the top where the best high schools in the country are located. These are the districts that supply the highest number of students to fill undergraduate programmes in all public universities year in and year out” (Michelle, from interviews). “In evaluating the eligibility of applicants, individual hardships faced by students from poorer and more marginalised districts are not taken into account (Zak, from interviews). The system is that of winner takes all”. This is a big challenge for the entire education system given that 75 per cent of all government sponsorship is allocated through the national merit system of distribution (Ivan, from personal interviews)*

The apparent lack of consideration of location factors was identified as the primary concern. The blinded perspective or the lack of consideration of location factors in the national merit distribution system explains the narrow district base in the student population, arising from the distortions of the district code. This requires greater attention as a factor in the public university educational distribution policies, systems and practices of governance.

With public university education gap clearly visible along regional and district lines, the

challenge of inequality in Uganda's public university education system appears nuanced and complex. Access and distribution of students, both in the top secondary schools in the country and in all public universities, requires greater policy attention for the country to ensure that the growing public university and tertiary educational opportunities are translated into equity of opportunities for men and women in all parts of the country. The district or location factor is thus a major structural conundrum of inequality in the distribution system of public university education in Uganda to an extent that it determines levels of access to population groups in the country, empowering one while disempowering another. Consequently, the distribution pattern has favoured regions where the top urban districts of the country are concentrated. The distribution policies and systems have not worked for students from remote districts of Uganda. They have not ensured that all districts of the country share in the benefit of higher education as a resource. The consequence is that of a narrow gender, geographic and demographic base in the distribution system of public university education. It has created a hierarchy of districts that provide the pipeline or supply chain for the public university educational distributional system. This has led to a phenomenon in which the rich seek to place their children in schools located in the top districts of the country in order to align them closer to the access pipeline and guarantee access to public university educational opportunities.

## **6.5 The Concept of Equity Distance and Equity Index of public university education**

How does social position of districts in public university educational distribution policies, systems and practices vary from one district of Uganda to another?

The Equity Distance to public university education was computed for each of the 112 districts of Uganda. The Equity Distance (ED) to education represents the difference between national rank and regional rank of a district in public university student population as calculated in step one above. Mathematically, the equity Distance is calculated using the follow formula:

$$V = E - R$$

Where

V is Equity Distance

E is the district's national rank in student population

R is district's regional rank in student population

The Equity Distance (ED) represents the difference between national and regional ranks in student population for each of the 112 districts of Uganda. It is a measure of the social position – the degree of relative ease or difficulty in accessing public university education in each district. The greater the numerical value of the ED, the greater the equity or access distance. Table 6.4 below provides a summary of the public university Equity Distance of districts based on the difference between the national and regional ranks of public university student population in 31 districts of Northern Uganda:

**Table 6.4: Summary of the Equity Distance of 31 districts in Northern Uganda**

DISTRICT	MALE	FEMALE	TOTAL	NATIONAL RANK (A)	REGIONAL RANK (B)	EQUITY/ACCESS DISTANCE (A-B)
ARUA	197	149	346	25	1	24
LIRA	196	118	314	29	2	27
GULU	114	76	190	40	3	37
KOLE	11	71	82	55	4	51
NWOYA	44	27	71	58	5	53
KITGUM	33	30	63	61	6	55
MOROTO	44	19	63	62	7	55
APAC	40	22	62	63	8	55
NEBBI	33	19	52	69	9	60
NAPAK	0	31	31	71	10	61
OTUKE	18	13	31	72	11	61
KOBOKO	25	5	30	74	12	62
MARACHA	20	9	29	75	13	62
MOYO	12	13	25	77	14	63
KOTIDO	16	8	24	79	15	64

KAABONG	12	10	22	80	16	64
ADJUMANI	11	9	20	83	17	66
AMURIA	9	9	18	84	18	66
AMURU	5	8	13	91	19	72
ABIM	5	7	12	92	20	72
YUMBE	11	1	12	93	21	72
PAIDAH	8	3	11	94	22	72
AMOLATAR	7	3	10	95	23	72
ALEBTONG	3	4	7	98	24	74
DOKOLO	5	2	7	100	25	75
ZOMBO	4	3	7	101	26	75
PADER	2	3	5	103	27	76
LAMWO	2	2	4	106	28	78
AMUDAT	2	1	3	108	29	79
AGAGO	1	1	2	110	30	80
PAKWACH	2	0	2	112	31	81

The comparison between the ED of two districts reflects the variations in the social phenomena and differences in the level of relative ease or difficulty in accessing public university educational opportunities. For example, while the shortest Equity Distance in Eastern Uganda was six in Jinja district, it was 24 (four times longer) in Arua district in Northern Uganda. While the equity/access distance between Arua (24) and Jinja (6) is four times wider, that between Arua (24) and Kampala (0) is 24. This shows that it is easier to get access to public university educational opportunities from a few districts of the country than from so many others.

In the eastern region, Bulambuli district recorded the longest ED at 78<sup>th</sup> place. Jinja at 6<sup>th</sup> place and Tororo, Iganga and Mbale (14<sup>th</sup>) were the best four districts by relative ease of access in the region. Unlike Northern Uganda, where the largest Equity Distance was 81, the difference between the smallest and the largest Equity Distance among districts in the east was 72 places, with a range of six in Jinja to 78 in Bulambuli, compared to 24<sup>th</sup> for Arua, the best-ranked district in Northern Uganda and Pakwach the worst at 81<sup>st</sup> place. With the exception of three districts (Arua, Lira and Gulu), the biggest Equity Distances between districts were observed in the region of Northern Uganda. Equity Distance in Northern Uganda varied from 24 in Arua to 81 in Pakwach districts. This demonstrates some similarity in the level of relative difficulty in access to public university educational opportunities among districts in the region. Pakwach, the district

that ranked lowest in student population in Northern Uganda, ranked 112 out of 112 districts nationally. Arua and Lira, the two best districts in relative level of ease in the region, ranked 25<sup>th</sup> and 29<sup>th</sup> nationally, followed by Gulu in the 40<sup>th</sup> place. The rest of the 28 districts in the northern region were ranked in the range of 55-112, with smaller Equity Distances in between. The Equity Distances between Arua and Pakwach districts (81 minus 24) were 55 places. Amuru, Abim, Yumbe, Paidah and Amolatar were among the districts with the smallest variation in Equity Distances from each other and yet among those with the highest levels of relative difficulty in access to public university education opportunities. Overall, the patterns of equity/access distances observed were similar in the districts of northern and eastern regions, on one hand, and those in central and western regions, on the other, with relative ease of access highest in Central and Western Uganda and lowest in the eastern and northern regions respectively. To compare the Equity Distances and the level of relative ease or difficulty in access to public university educational opportunities by district, Figures 6.3 and 6.4 below illustrate the similarities in variations in the patterns of Equity Distances between the districts of Northern Uganda, on one hand, and those in Eastern Uganda on the other:

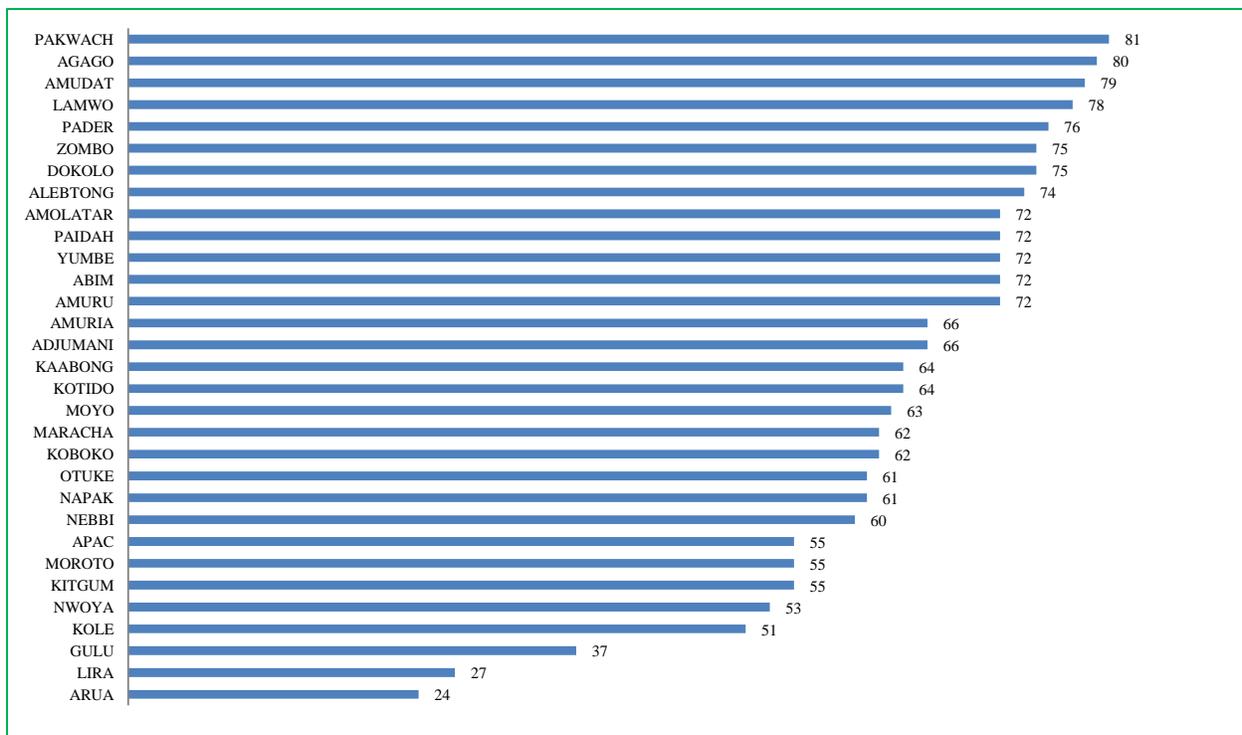
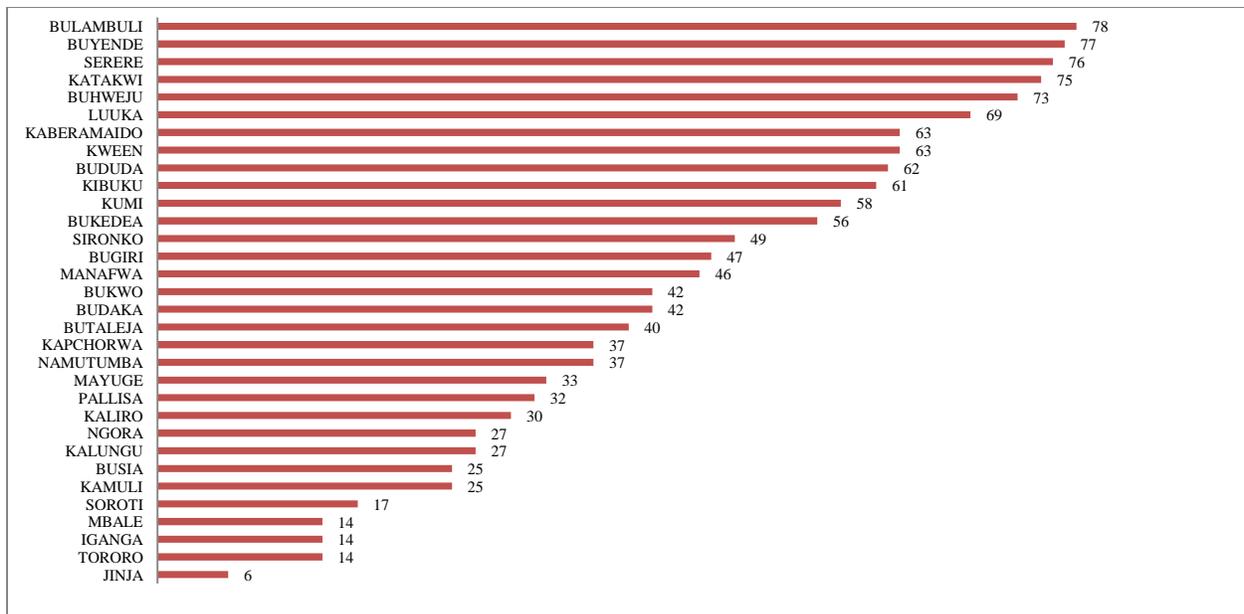
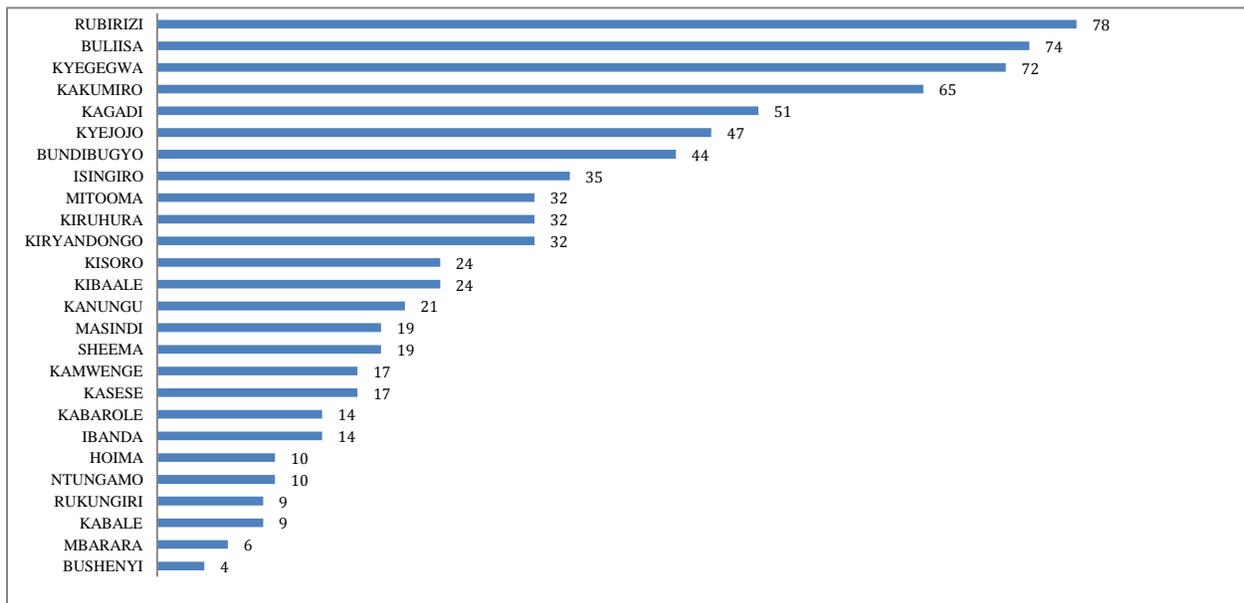


Figure 6.3: Distribution pattern of equity/access distances of Northern Uganda districts to public university educational opportunities

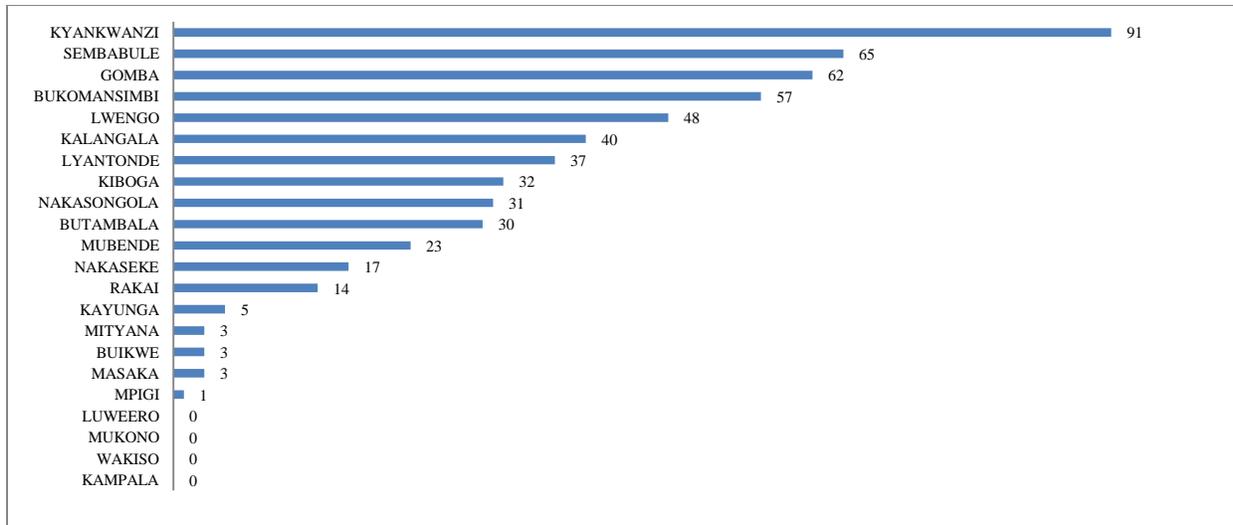


**Figure 6.4: Distribution pattern of equity/access distances of Eastern Uganda districts to public university educational opportunities**

The two regions of Central and Western Uganda were nearer to each other in their patterns of Equity Distances. Figures 6.5 and 6.6 below show similarities in the patterns of Equity Distances between Equity Distance districts in Central and Western Uganda respectively:



**Figure 6.5: Distribution pattern of equity/access distances of Western Uganda districts to public university educational opportunities**



**Figure 6.6: Distribution pattern of equity/access distances of Central Uganda districts to public university educational opportunities**

The similarities in the patterns of Equity Distances observed between the north and the east and then the central and the western regions respectively were due to the similarities in the patterns of regional disparities. This was a result of the similarities in disparities between districts and schools in the two geographical regions of central and western blocks and Northern and Eastern Uganda respectively. These disparities are demonstrated in the dominance of the central and western regions of the country in the top categories of districts in the public university sub sector. The Central and Western regions accounted for nearly two-thirds of the student population qualifying from schools located in Kampala (30.1 per cent) and Wakiso (20 per cent) districts and one in every two students nationally either qualifying from a high school in Kampala or Wakiso districts respectively.

As illustrated in the districts of Kampala, Mukono, Luwero, Mpigi and Jinja, the shorter the Equity Distance, the smaller the district equity gaps in the region. While the best districts in central, west and east were ranked from 1<sup>st</sup> to 7<sup>th</sup> position nationally, Arua, the best district in Northern Uganda was ranked in the 25<sup>th</sup> place. Only two (out of 31) districts in Northern Uganda, ranked among the leading 30 districts nationally. The two districts were Arua and Lira, at 25<sup>th</sup> and 29<sup>th</sup> places respectively, compared to six (19 per cent) of the districts in the eastern region, 11 (42 per cent) of districts in Western Uganda and 10 (48 per cent) of districts in Central Uganda. In Northern Uganda where the lowest ranked districts are, student population ranged

from two in Pakwach to 346 in Arua over the eight-year period, in comparison to Eastern Uganda, with two students in Bulambuli and 2 122 in Jinja. In the western and central regions, the number of students ranged from 104 in Rubirizi district to 3 810 in Bushenyi, and from 113 in Kyamkwazi district to 30 884 in Kampala. The Equity Distance analysis reveals the student gap – the extent of disparities resulting from the geographic and demographic exclusion of the districts in Uganda from public university educational opportunities and the lack of a distribution policy that considers the district code.

While Equity Distance shows levels of disparity in ease or difficulty in access to public university educational opportunities between districts, it is not a reflection of the Equity Gap or inequality between schools in one region and those in another. As shown in Appendix 5.5 and 5.6, larger Equity Gaps means longer Equity Distances between schools. However, it does not mean that Equity Distances or gaps between schools in the eastern region were bigger than those in the northern region were. It means that disparities in the Equity Gaps or levels of educational inequality between districts are more evenly distributed among schools in the north than those in the east. In other words, districts and schools in the north were more equal in levels of disparities or marginalisation, defined by their lower social-economic status, than those in the east. Appendices 5.7 and 5.8 show a striking similarity in the patterns of Equity Gaps/distance across the districts of Central and Western Uganda respectively. While similarities in the pattern of Equity Distances in the two regions of Central and Western Uganda show the similarity in relative ease of access, that between Northern and Eastern Uganda is largely a reflection of the relative difficulty in access to public university educational opportunities from districts and schools located in the two regions. The region of the country with the greatest share of districts where the best secondary schools of admission are located was also the region with the highest proportion of students by district of origin.

## **6.6 The concept of National Equity Index for public university education**

Following the Equity Distance analysis, an Equity Distance Index ( $\bar{E}$ ) of districts in public university, education was calculated, to identify specific locations, regions and districts of the country where public university educational gap is most concentrated. The Equity Distance Index is calculated using the following mathematical formula:

$$\check{E} = \frac{\exists - \#}{100}$$

Where;

$\check{E}$  is the National Equity Index

$\exists$  is district's national rank in student population

$\#$  is district's regional rank in student population

While the concept of Equity Distance (ED) comprehends and compares levels of relative ease or difficulty in access to public university educational opportunities from one district to another, the National Equity Index (NEI) for public university education provides an Equity Classification system to cluster the 112 districts of Uganda into seven equity intra-categories. It is based on inter- and intra-categorical approach of feminist theories that recognise the importance of inter- and intra-group differences (Kerry & Bland, 1998) and inequalities within and among regions and districts of the country as already constituted groups (McCall, 2005). It brings the role and implications of structural relations or bias in policies, systems and practices (McCall, 2005: 1784-85) into sharp focus, particularly in the understanding of resource allocation and variations in its distribution “among already constituted groups” (McCall, 2005: 1784-85; Yiu, 2011). It provides the meaning frame for “comparative multi-group analyses” and investigation of groups that constitute each category (McCall, 2005: 1786-87; Donzelli, 2018).

While ED is estimated as the difference between the district's national and regional ranks in student population, NEI is the quotient of the difference between the district's national and regional ranks in student population. As measures of inequality, ED and NEI are part of the population quota-based Fair Share Equity Framework of analysis, developed in this study to advance the notion of equity in the study of inequality in the distribution of public university educational opportunities from a governance dimension.

Table 6.5 below provides a summary of the National Equity Index (NEI) of public university education of each of 112 districts of Uganda:

**Table 6.5: A summary of the National Equity Index (NEI) of public university education of 112 districts of Uganda**

DISTRICT	REGION	NATIONAL RANK	REGIONAL RANK	NATIONAL EQUITY INDEX
<b>DISTRICTS IN EQUITY CATEGORY SEVEN</b>				
KYANKWANZI	CENTRAL REGION	113	22	0.9
PAKWACH	NORTH REGION	112	31	0.8
AGAGO	NORTH REGION	110	30	0.8
AMUDAT	NORTH REGION	108	29	0.8
BULAMBULI	EAST REGION	111	32	0.8
LAMWO	NORTH REGION	106	28	0.8
BUYENDE	EAST REGION	109	31	0.8
RUBIRIZI	WEST REGION	104	26	0.8
SERERE	EAST REGION	107	30	0.8
PADER	NORTH REGION	103	27	0.8
KATAKWI	EAST REGION	105	29	0.8
DOKOLO	NORTH REGION	100	25	0.8
ZOMBO	NORTH REGION	101	26	0.8
ALEBTONG	NORTH REGION	98	24	0.7
BUHWEJU	EAST REGION	102	28	0.7
BULIISA	WEST REGION	99	25	0.7
AMURU	NORTH REGION	91	19	0.7
ABIM	NORTH REGION	92	20	0.7
YUMBE	NORTH REGION	93	21	0.7
PAIDAH	NORTH REGION	94	22	0.7
AMOLATAR	NORTH REGION	95	23	0.7
KYELEGWA	WEST REGION	96	24	0.7
LUUKA	EAST REGION	97	27	0.7
ADJUMANI	NORTH REGION	83	17	0.7
AMURIA	NORTH REGION	84	18	0.7
KAKUMIRO	WEST REGION	88	23	0.7
SEMBABULE	CENTRAL REGION	86	21	0.7
KOTIDO	NORTH REGION	79	15	0.6
KAABONG	NORTH REGION	80	16	0.6
KWEEN	EAST REGION	89	25	0.6
KABERAMAIDO	EAST REGION	90	26	0.6
MOYO	NORTH REGION	77	14	0.6
BUDUDA	EAST REGION	87	24	0.6
KOBOKO	NORTH REGION	74	12	0.6

MARACHA	NORTH REGION	75	13	0.6
KIBUKU	EAST REGION	85	23	0.6
GOMBA	CENTRAL REGION	82	20	0.6
NAPAK	NORTH REGION	71	10	0.6
OTUKE	NORTH REGION	72	11	0.6
NEBBI	NORTH REGION	69	9	0.6
KUMI	EAST REGION	81	22	0.6
BUKEDEA	EAST REGION	78	21	0.6
BUKOMANSIMBI	CENTRAL REGION	76	19	0.6
KITGUM	NORTH REGION	61	6	0.6
MOROTO	NORTH REGION	62	7	0.6
APAC	NORTH REGION	63	8	0.6
<b>DISTRICTS IN CATEGORY SIX</b>				
NWOYA	NORTH REGION	58	5	0.5
KOLE	NORTH REGION	55	4	0.5
KAGADI	WEST REGION	73	22	0.5
SIRONKO	EAST REGION	70	20	0.5
BUGIRI	EAST REGION	67	19	0.5
LWENGO	CENTRAL REGION	66	18	0.5
MANAFWA	EAST REGION	65	18	0.5
KYEJOJO	WEST REGION	68	21	0.5
<b>DISTRICTS IN CATEGORY FIVE</b>				
BUNDIBUGYO	WEST REGION	64	20	0.4
BUDAKA	EAST REGION	59	16	0.4
BUKWO	EAST REGION	60	17	0.4
BUTALEJA	EAST REGION	56	15	0.4
KALANGALA	CENTRAL REGION	57	17	0.4
KAPCHORWA	EAST REGION	52	14	0.4
GULU	NORTH REGION	40	3	0.4
LYANTONDE	CENTRAL REGION	53	16	0.4
NAMUTUMBA	EAST REGION	51	15	0.4
ISINGIRO	WEST REGION	54	19	0.4
<b>DISTRICTS IN CATEGORY FOUR</b>				
MAYUGE	EAST REGION	46	13	0.3
KIBOGA	CENTRAL REGION	47	14	0.3
PALLISA	EAST REGION	44	12	0.3
KIRYANDONGO	WEST REGION	48	16	0.3
KIRUHURA	WEST REGION	49	17	0.3
MITOOMA	WEST REGION	50	18	0.3

NAKASONGOLA	CENTRAL REGION	45	13	0.3
BUTAMBALA	CENTRAL REGION	43	12	0.3
KALIRO	EAST REGION	41	11	0.3
LIRA	NORTH REGION	29	2	0.3
KALUNGU	EAST REGION	36	9	0.3
NGORA	EAST REGION	37	10	0.3
KAMULI	EAST REGION	32	7	0.3
BUSIA	EAST REGION	33	8	0.3
<b>DISTRICTS IN CATEGORY THREE</b>				
ARUA	NORTH REGION	25	1	0.2
KIBAALE	WEST REGION	38	14	0.2
KISORO	WEST REGION	39	15	0.2
MUBENDE	CENTRAL REGION	35	11	0.2
KANUNGU	WEST REGION	34	13	0.2
SHEEMA	WEST REGION	30	11	0.2
MASINDI	WEST REGION	31	12	0.2
NAKASEKE	CENTRAL REGION	28	10	0.2
SOROTI	EAST REGION	23	6	0.2
KASESE	WEST REGION	26	9	0.2
KAMWENGE	WEST REGION	27	10	0.2
RAKAI	CENTRAL REGION	24	9	0.2
<b>DISTRICTS IN CATEGORY TWO</b>				
TORORO	EAST REGION	17	3	0.1
IGANGA	EAST REGION	18	4	0.1
MBALE	EAST REGION	19	5	0.1
IBANDA	WEST REGION	21	7	0.1
KABAROLE	WEST REGION	22	8	0.1
NTUNGAMO	WEST REGION	15	5	0.1
HOIMA	WEST REGION	16	6	0.1
KABALE	WEST REGION	12	3	0.1
RUKUNGIRI	WEST REGION	13	4	0.1
BUIKWE	EAST REGION	10	2	0.1
JINJA	EAST REGION	7	1	0.1
MBARARA	WEST REGION	8	2	0.1
KAYUNGA	CENTRAL REGION	14	8	0.1
<b>DISTRICTS IN CATEGORY ONE</b>				
BUSHENYI	WEST REGION	5	1	0.0
MITYANA	CENTRAL REGION	11	7	0.0
MASAKA	CENTRAL REGION	9	6	0.0

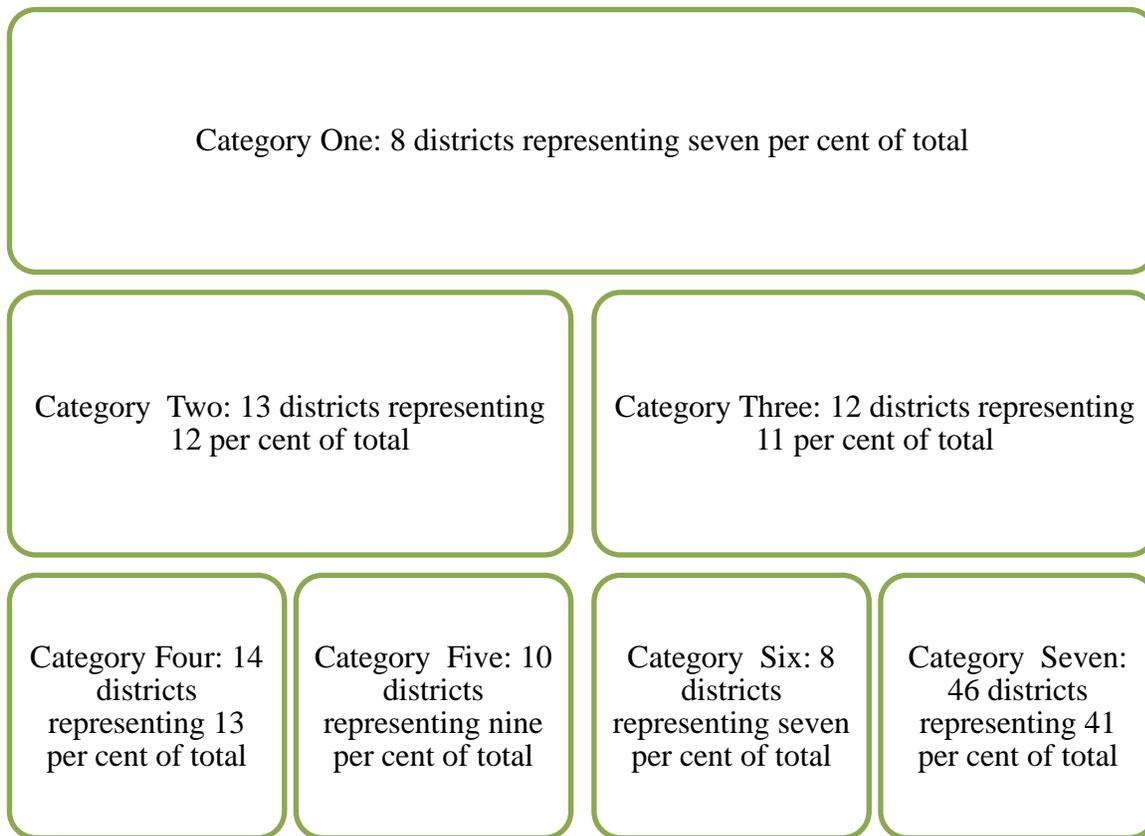
MPIGI	CENTRAL REGION	6	5	0.0
KAMPALA	CENTRAL REGION	1	1	0.0
WAKISO	CENTRAL REGION	2	2	0.0
MUKONO	CENTRAL REGION	3	3	0.0
LUWEERO	CENTRAL REGION	4	4	0.0

NEI values range from zero to one. Whereas a value of zero indicates the highest level of access from the district due to the policies, systems and practices responsible for the public university educational distribution system, a value near one indicates the highest level of inequality or gap for the district in the distribution system for males and females in the district. Based on the values of EI, the 112 districts of Uganda were clustered into seven equity categories, to make inter-group comparisons of the phenomenon possible and give policy makers the tool to measure Equity Gaps in resource distribution, identify districts where gaps are most concentrated and provide appropriate social policy response. The equity categories of districts illustrates a hierarchy of districts that dictates levels of access to public university education, based on the level of the influence of the district factor on the country's national merit and district population quota-based policies and systems of governance of the distribution of public university educational opportunities. Based on the National Equity Index (NEI) calculated in table 6.5 above, an Equity Classification system was developed to cluster the 112 districts of Uganda into seven equity categories. The categories were based on the NEI values ranging from zero to one (0-1). Table 6.6 below presents a summary of the number of districts classified in each of the seven equity categories:

**Table 6.6: Number of districts of Uganda by equity category for public university education**

Equity category	NEI range	Number of districts	Percentage
<b>1</b>	0.0-0.0	8	7
<b>2</b>	0.1-0.1	13	12
<b>3</b>	0.2-0.2	12	11
<b>4</b>	0.3-0.3	14	13
<b>5</b>	0.4-0.3	10	9
<b>6</b>	0.5-0.5	8	7
<b>7</b>	0.6-0.9	46	41
<b>Total</b>		<b>111</b>	<b>100</b>

The proportions of districts in each equity category varied from region to region. Figure 6.7 below shows the proportional distribution of districts in each equity category:



**Figure 6.7: The percentage distribution of districts of Uganda by equity category in public university education**

Altogether, 41 per cent of the districts of Uganda were in category seven, with a NEI range of 0.6-0.9. These were the districts with the highest levels of inequality and therefore the most marginalised or excluded in terms of the distribution of public university educational opportunities as a resource. There were eight districts in equity category one. All except one are in the central region of Uganda. The eight districts in equity category one represented the top seven per cent of districts that controlled 71 per cent of public university educational opportunities. Only 12 per cent of districts were in category two, 11 per cent in three, 13 per cent in four, nine percent in five, and seven per cent in the sixth category. The majority – forty-one per cent of districts of Uganda belonged to category seven.

## 6.7 Discussion

There was a strong relationship between districts where the best secondary schools of admission were located and levels of relative ease of access to public university educational opportunities in Uganda. Districts with shorter Equity Distances had the highest proportions of student population by origin and by the location of the best high schools. The central region of Uganda, which accounted for 40 per cent of the top 20 districts, had 36 per cent of the student population by region of origin. The West, with 35 per cent of the top 20 districts, had a share of 31 per cent of students who originated from districts within the region. Twenty-five per cent of the top 20 districts and 22 per cent of the student population by district of origin were in the East. Only 10 per cent of the student population originated from the districts in Northern Uganda. There was no single district in the Northern region among the top 20, implying that the majority of the student population in Northern Uganda qualified from high schools located outside their region. Ten per cent of student population in the country had home districts located in the northern region. Nine out of every 10 students from Northern Uganda qualified from high schools located outside the region.

Of the eight districts with the best ease of access, seven were in the central region. Twelve per cent of districts ranked in the second category of relative ease of access, 11 per cent in category three, 13 per cent in four, nine per cent in five, and seven per cent in the sixth. While the central region of Uganda dominated category one by 88 per cent, the western region dominated categories two and three by 54 per cent and 58 per cent of districts respectively. The east dominated cluster three (at 46 per cent along with the west at 54 per cent), cluster four at 50 per cent, cluster five at 40 per cent, six at 38 per cent and seven at 24 per cent. The prominence of the northern region was only in the weakest category seven with 57 per cent of its districts belonging to the category. Along with the eastern region, the two regions of the north and the east accounted for 81 per cent of districts, characterised by the largest student gap and schools with the lowest chances of access to a public university opportunity. This implies that the majority of districts where more prominent forms of social action are needed are in the northern (57 per cent) and eastern (23 per cent) regions of Uganda respectively.

Overall proportions of districts in the top three NEI categories were 46 per cent in the west, 33

per cent in the central, 18 per cent in the east and three per cent in the north. While category one represented districts with the best high schools in the country, cluster seven represented the lowest performing districts (which constituted 41 per cent of the total). In the most exclusive category (1) were seven districts in central and one in the western regions. In the seventh category were the least performing districts, with regional proportions of districts ranging from a mere 14 per cent in the central, to 22 per cent in the west, 35 per cent in the east and 84 per cent in the north. Equity disparities across districts were greatest in Northern Uganda, with the smallest proportions of categories two, three, four, five and six districts and the largest share of category seven districts.

From 2005/2006 Academic year, a district quota system for public university educational distribution was introduced in Uganda, in response to concerns that the national merit system was discriminatory to students who qualify from remote districts of the country. The purpose of the quota system was to make the distribution system both fair and equal, to ensure that students from all districts have access to quality public university education. Seventy-five per cent (instead of 100 per cent) of the 4 000 public university government sponsorship opportunities would be distributed through the national merit system. The remaining 25 per cent (1 000 out of 4 000 slots in total) would be allotted through a district quota system, with a fixed number of places reserved for talented sportsmen and women and persons with disabilities. The rest would be assigned to candidates who write their entry Advanced level examinations from schools located in home districts in line with the district population quota.

The distribution system for public university educational opportunities in Uganda still relies on a narrow base of the student population from a few districts of the country. Far fewer students from underprivileged and remote districts were admitted for public university education from 2009 to 2017 compared to those from the elite urban districts of the country. The influence of the district factor/code on the distribution system means that inequality in the distribution policies and systems explain why the distribution pattern of the public university student population in Uganda has varied significantly within regions and within districts.

The findings of this study confirm the conclusions of the World Bank (Brock-Utne, 2000). In its study on rates of return on higher education (ROI), the World Bank and the International

Monetary Fund (IMF) concluded that higher education in Africa was more of a private good than a public good and that it ensured more personal economic returns than public benefits (Kotecha, 2012; World Bank, 2009; Brock-Utne, 2000). The study led to massive cuts in higher education expenditure in the era of the Structural Adjustment programme for Africa, limited public expenditure, with the African elite taking the centre stage in acquiring the majority of the higher education share on the continent. This has hampered the goal of equity and equality in public university educational distribution and in other forms of tertiary education, including vocational education (Kotecha et al., 2012; Varghese, 2004) with stringent compliance rules and requirements for admission that restrict entry (Varghese, 2004: 12).

It is worth emphasising that the current definition of individual merit does not equally benefit top students from less competitive districts. The practice may be seen to be discriminatory to schools in remote districts of the country where the majority of the country's poorest population is enrolled. The meaning, functions and implications of the system do not address the question of inequality because they do not take into account regional and district status. They do not recognise that schools, colleges and universities have an obligation to pursue scholarly excellence on one hand, and civic duty/goods on the other and that the objective of any admission policy should be to ensure balance in these purposes to promote equity as a key development objective.

When Uganda decided to move from a mass to a universal primary education (UPE) model in 1997, policy makers did not anticipate the implications of this move for mass secondary and higher education. The policy framework did not address the issue of linking reforms for universal primary and mass secondary education to higher education. Before 2000, participation in secondary and higher education was very low however, in the late 1990s, rapid developments took place in Uganda's primary and secondary education arena. These included the move towards universal secondary education. By the turn of the millennium, the participation rate in primary education had more than doubled. This forced the body politic to begin contemplating a shift of focus towards universal secondary education. This was however, done politically, without consideration for the possibilities for mass and universal higher education that was to follow. This may explain what appears to be the lack of strategy and planning to address the

issue that continues to undermine the system. Reforms that led to universal primary and secondary education were not seen as a part of a larger transformation agenda in the context of the country's education system. The lack of consideration for a parallel development process for mass and universal secondary and higher education system was a mistake. This meant that the higher education system was not ready to respond to the new demands ushered in by the UPE era. Instead, it has continued to aspire to its original elite model, not because it is insensitive and irresponsible, but because it is not structurally ready to meet the expanded nature of demand for higher education that comes along with mass and universal secondary schooling.

The reason for this, at least in part, is due to weaknesses in the governance of the educational distribution system, particularly the distribution of quality education in the context of both private and public education systems. The fact that higher education admission is dominated by a few top secondary schools indicates that the levers of control have shifted out of government control. This has effectively led to a governance system of the distribution of the benefit of higher education, which gives rise to a new set of challenges – the growing levels of inequality due to the rigid stratification and ranking of students based on the presumed difference in the quality of Advanced level credentials and the fierce competition associated with entrance requirements. This has paralysed the national merit system, shifting the developments in Uganda's higher education system rapidly in an opposite direction, in retrospect, to the 1960s when government, through the Ministry of Education, responded to the equity demand in the development of higher education in spite of more limited access and participation opportunities at the time.

The factors that accounted for the widening gap between regions and districts: (a) the lack of mandatory minimum requirements or specific quotas to boost the minority district student population in minority district oriented secondary schools and public university colleges, to address geographical imbalances and disadvantages in the admission system; (b) the fact that no university education programmes, including health sciences and engineering, had quotas for districts with students who meet the minimum requirement for admission; and (d) the 75 and 25 per cent policy, introduced with effect from 2006. This does not address geographical imbalances and disadvantages in the admission system. The districts therefore account for a

phenomenon where the relatively well off seek to move students out of their districts of origin in search of an ideal school system. This is found in the top districts where students are presented with greater opportunities and the motivation for higher education. The result is a pattern of repeated intergenerational choices of poor schools for the parent and child and a vicious cycle of cause and effect that condemns students from poorer backgrounds to lower quality education, with fewer opportunities for higher education and social mobility.

Not every student who works hard gets a fair share in the distribution of public university educational opportunities in Uganda, as access and participation has become a factor of their high school or district of origin. Other than merit, the system is based on privilege. There is a monopoly of districts where access to a public university qualification is guaranteed, based on the ability to pay or to afford spaces at the top secondary schools in the country. The national merit system has placed significant limits on the poor. The district factor – the degree of relative ease or difficulty in accessing the public university educational opportunities from the students' district of origin, and the impact of policies and systems responsible for the distribution of public university educational opportunities by district of origin is a governance issue. The resultant Equity Gaps in public university education in districts, due to the impact of policies and systems responsible for the distribution of public university educational opportunities by district, is also a governance issue. This explains the public university education policy and systems gap, a phenomenon, which has created a hierarchy of districts in the public university distribution system that governs access to public university educational opportunities. In fact, one's opportunity for a public university education under Uganda's national merit based policies and systems of distribution depends on prior access to schools located in districts that dictate the distribution of public university educational opportunities in the country.

## **6.8 Conclusion and recommendation**

While Uganda experienced significant growth in its higher education sub sector, most of the benefits of access to public university educational opportunities went to districts at the top. The top 20 per cent of districts controlled 90.5 per cent of the total student population. Only 0.2 per cent of the student population was distributed in the bottom 40 per cent of districts. The concentration of the distribution of public university educational opportunities in the top districts

led to a narrowing of the district base of the public university educational distribution system, with long-term implications for inequality, regional imbalances, uneven development, and inadequate provision of social services. The notion of the distribution of higher education as a social justice issue was absent in the policies, systems and practices responsible for ensuring equity and its access and distribution in the regions and districts of the country. Moreover, districts in the poorest equity categories of higher education were those that are historically disadvantaged for social, economic and cultural reasons. This is in spite of a growing public university education subsector and the national economy over the last three decades.

The public university educational gaps revealed in districts of Uganda were compounded by the absence of an adequate population based system of governance, particularly in the distribution policies and practices of the top secondary schools and tertiary institutions in Uganda. The perception from the interviews was that the notion of the national individual merit, as currently defined, is too narrow to achieve the goal of equity and equality in the sector. It has instituted a growing number of underclass districts, whose level of access to public university opportunities does not match that of the elite districts in the top categories. If left unchecked, the system would entrench, perpetuate inequality in poorer districts, and renew political tensions in the country.

A dimensional shift in the public university educational distributional system is required to tackle the growing challenge of public university educational inequality across districts. Irrespective of the number of government sponsorships available for public university education each year, equity requires policy makers and implementers to balance the supply side of the system, defined here as the best students in exams, with demand/equity. This would mean that men and women from all districts and regions of the country could be treated fairly to receive a fair share in the distribution of the national public university education as a vital resource.

Given the limitations on resource availability, the emphasis should be on addressing structural disadvantages, especially the geographical and demographic status of districts, in access criteria for quality education. The task that must be accomplished in order to address the twin structural challenges of location and gender is to marry the dichotomy between the secondary school system and the public university educational distribution system of admission. Neither one nor the other can be independent of each other, nor can they be privatised. Both should be part of the

central government function. The Education Act of 2008 gives full effect to education policies and services as a function of local and central government. This implies that it is public, not private, policy or market forces that should regulate access and the distribution of the student population admitted from the top high schools and subsequently to the limited public university educational opportunities available.

The Uganda Ministry of Education and Sports must reclaim full control over the educational distribution system. It is the role of the state to distribute quality education to all districts equally, and to ensure that secondary schools – especially private schools – are taking steps to include students from remote districts and underprivileged schools in their campuses. To prevent exclusionary practices in the admission system, overcome the injustices and inequalities of the past and promote social mobility for all, I recommend that:

- Admission to senior one (Grade 8), senior five (Grade 11) and public university fields of studies at undergraduate level should not be assigned according to criteria that rely on individual privileges.
- A district quota-based admission policy be incorporated into the admission practices of the top secondary schools and in the key public university fields of study critical to economic growth and development of Uganda.

In evaluating the eligibility of applicants, I recommend that district quotas become the primary consideration to address structural disadvantages. This would imply that the top secondary schools and fields of studies in tertiary and higher education would have quotas assigned for all districts to achieve their minimum fair share of human capital investment allocation. Such a policy can only be good for the country as a whole. It would guarantee the education and training of a sufficient number of professionals from every district in a manner that ensures the availability of key skills needed for local and nationwide needs.

A district quota-based admission policy for secondary schools, tertiary institutions and universities would lead to a balance between the focus on supply (the policy of the best students in exams) and demand – the need to address inequality in the distribution of student population. This means that men and women from all districts and regions of the country can receive a fair

share in the distribution of this very important national resource. A district quota-based admission policy would regulate the distribution of quality secondary schooling at all levels, make the secondary school, tertiary and university education systems more representative of the geographical and demographic features of Uganda and promote cohesion and national unity. It would address the structural realities that hinder the potential of Uganda's education system to be a driver of development, particularly in the context of the role of higher education in the global knowledge economy. It will contribute to strengthening democratic norms and the human capital base needed for the country's entire economic development, informed citizenry, good governance, peace and security.

The risk of focusing on the relatively well off without confronting the realities of communities who suffer from economic disadvantage and marginalisation would be avoided. Women and men from remote districts of the country would be brought into the mainstream of quality education and in the public university educational distribution system. It would put greater emphasis on the distribution system to cope with the challenge of bridging gender as well as district gaps in public university colleges and in all key fields of study critical to economic growth and development.

In the next chapter, the study builds on the feminist theory of social position to analyse the meaning, functions and implications of students' high schools in Uganda's public university educational distribution system. The chapter analyses the potential benefits high schools render to epistemic groups that are specific to the feminist Standpoint Theory of social position. It assesses the role and functions performed by high school as a factor of social position and its possible influence on the policies and systems responsible for the distribution of public university education in Uganda.

# **CHAPTER SEVEN**

## **THE HIGH SCHOOLS FACTOR AND PUBLIC UNIVERSITY EDUCATIONAL DISTRIBUTION IN UGANDA**

Does the high school matter in the distribution policies, systems and practices of public university education in regions, districts and public university fields of study in Uganda?

### **7.1 Introduction**

Chapter Seven builds on the feminist theory of social position to examine if and how students' high school really matters in Uganda's public university educational distribution system. It seeks to analyse the potential benefits high schools provide to epistemic groups that are specific to the feminist discourse of social position found in the Standpoint Theory. It examines potential variations in the social phenomenon among multiple groups of schools involved in the distribution system and assesses possible limitations rendered by the same system to schools in different locations in the region. The chapter assesses the role and functions performed by high schools as a factor of social position in the policies and systems responsible for the distribution of public university education in Uganda. It explores, in detail, if and how access to public university educational opportunities shift depending on high school in response to the feminist discourse of social position. The chapter relates the concepts of social location to that of social position and epistemic advantage, with regards to the role of the high school factor in the governance of the distribution of public university educational opportunities in regions and districts of Uganda. It identifies the concepts of the hierarchy of the secondary schools system, secondary school systems' gap and access pipeline for public university education and their significance in the policies, systems and practices responsible for the distribution of public university educational opportunities in regions, districts and public university fields of study in Uganda. A multi-group comparative analysis of the phenomenon, involving 1 178 high schools in 112 districts is undertaken to examine the potential existence of inter-group differences – inequalities in access to public university educational opportunities from a student population of 101 504 involved in this study.

## 7.2 Ranking of high schools by public university student population

To assess the role of the high school factor, the public university student population of 101 504 admitted to five public universities from 1 178 secondary schools, over the eight-year period, was ranked by high school from which they qualified. Table 7.1 below provides a summary of the ranking of the top 100 high schools by their public university student population. These top 100 high schools were among a total of 1 178 that accounted for the public university student population of 101 504 from 2009 to 2017:

**Table 7.1: A summary of the ranking of the top 100 high schools by their public university student population**

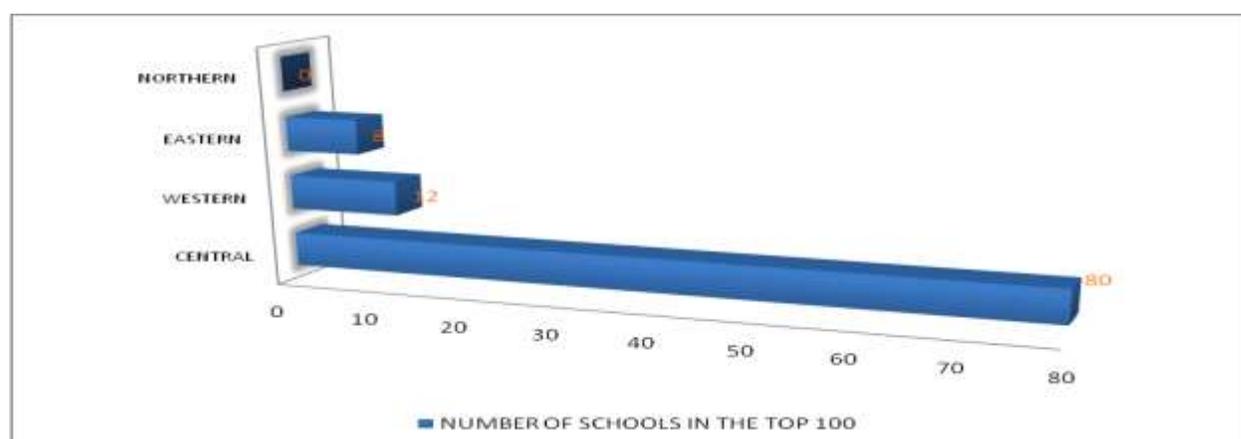
SECONDARY SCHOOL (SS)	DISTRICT	OWNERSHIP	MALE	FEMALE	TOTAL	RANK
ST MARY'S SS KITENDE	WAKISO	PRIVATE	1160	990	2150	1
SEETA HS MUKONO	MUKONO	PRIVATE	865	898	1763	2
MENGO SS KAMPALA	KAMPALA	GOVERNMENT	1001	635	1636	3
NAALYA SS, KAMPALA	KAMPALA	PRIVATE	786	778	1564	4
LUBIRI SECONDARY SCHOOL	KAMPALA	GOVERNMENT	813	672	1485	5
NAMIREMBE HILLSIDE SS	WAKISO	GOVERNMENT	673	685	1358	6
BUDDO SS, KAMPALA	KAMPALA	PRIVATE	5 42	724	1266	7
GOMBE SECONDARY SCHOOL	MPIGI	GOVERNMENT	619	543	1162	8
UGANDA MARTYRS SS NAMUGONGO	WAKISO	GOVERNMENT	528	492	1020	9
MAKERERE COLLEGE SCHOOL	KAMPALA	GOVERNMENT	551	431	982	10
OLD KAMPALA SS	KAMPALA	GOVERNMENT	546	365	911	11
BP CYPRIAN KIHANGIRE SS LUZIRA	KAMPALA	PRIVATE	420	436	856	12
NABISUNSA GIRLS' SCHOOL	KAMPALA	GOVERNMENT	5	798	803	13
MERRYLAND HIGH SCHOOL	WAKISO	PRIVATE	466	331	797	14
KIBULI SECONDARY SCHOOL	KAMPALA	GOVERNMENT	527	252	779	15
NTINDA VIEW COLLEGE	KAMPALA	PRIVATE	632	143	775	16
MASAKA SECONDARY SCHOOL	MASAKA	GOVERNMENT	465	295	760	17
KYAMBOGO COLLEGE SCHOOL	KAMPALA	GOVERNMENT	508	239	747	18
VALLEY COLLEGE SS BUSHENYI	BUSHENYI	PRIVATE	444	297	741	19
LUGAZI MIXED SEC SCH	BUIKWE	PRIVATE	347	362	709	20
KATIKAMU SS WOBULENZI	LUWEERO	GOVERNMENT	342	351	693	21
ST MARY'S COLLEGE LUGAZI	BUIKWE	PRIVATE	415	267	682	22
KING'S COLLEGE BUDO	WAKISO	GOVERNMENT	421	248	669	23

EAST HIGH SCHOOL, KAMPALA	KAMPALA	GOVERNMENT	363	303	666	24
HILTON HIGH SCHOOL	MUKONO	PRIVATE	357	274	631	25
BWERANYANGI GIRLS' SCHOOL	BUSHENYI	GOVERNMENT	0	623	623	26
KAWEMPE MUSLIM SS	KAMPALA	GOVERNMENT	375	233	608	27
IMMACULATE HEART GIRLS SCHOOL	RUKUNGIRI	GOVERNMENT	0	606	606	28
KAKUNGULU MEM SCH KAMPALA	KAMPALA	GOVERNMENT	300	301	601	29
MANDELA S S HOIMA	HOIMA	GOVERNMENT	323	266	589	30
MBARARA HIGH SCHOOL	MBARARA	GOVERNMENT	442	141	583	31
OUR LADY OF AFRICA SS NAMILYANGO	MUKONO	PRIVATE	272	307	579	32
ST MARK'S SS NAMAGOMA	MUKONO	PRIVATE	290	279	569	33
NTARE SCHOOL	MBARARA	GOVERNMENT	508	61	569	34
KITANTE HILL SCHOOL	KAMPALA	GOVERNMENT	268	285	553	35
NDEJJE SECONDARY SCHOOL	LUWEERO	GOVERNMENT	315	237	552	36
KINAAWA HIGH SCHOOL	WAKISO	GOVERNMENT	281	257	538	37
BULOBA HIGH SCHOOL	WAKISO	PRIVATE	235	284	519	38
ST MARY'S COLLEGE KISUBI	WAKISO	GOVERNMENT	487	30	517	39
LUZIRA LAKESIDE COLLEGE	KAMPALA	PRIVATE	254	249	503	40
MBOGO MIXED SEC SCHOOL	KAMPALA	GOVERNMENT	278	218	496	41
SEROMA CHRISTIAN HS	MUKONO	PRIVATE	235	258	493	42
KIBIBI SECONDARY SCHOOL	MPIGI	GOVERNMENT	238	252	490	43
KAJJANSI PROGRESSIVE SS	WAKISO	PRIVATE	250	240	490	44
ST PETER'S S S NSAMBYA	KAMPALA	PRIVATE	287	193	480	45
MBOGO HIGH SCHOOL	KAMPALA	PRIVATE	66	403	469	46
LONDON COL ST LAWRENCE MAYA	KAMPALA	PRIVATE	222	222	444	47
WAMPEWO NTAKE SS	WAKISO	GOVERNMENT	214	225	439	48
ST AUGUSTINE COL WAKISO	WAKISO	PRIVATE	197	239	436	49
KIIRA COLLEGE BUTIKI	JINJA	GOVERNMENT	371	55	426	50
GAYAZA HIGH SCHOOL	WAKISO	GOVERNMENT	0	424	424	51
LUBIRI HIGH SCHOOL	KAMPALA	PRIVATE	202	215	417	52
PLUS TWO HIGH SCHOOL	BUSHENYI	PRIVATE	282	127	409	53
TRINITY COLLEGE NABBINGO	WAKISO	GOVERNMENT	0	258	408	54
NAMILYANGO COLLEGE	MUKONO MC	GOVERNMENT	362	42	404	55
ST AGNES GIRLS SS	BUSHENYI	PRIVATE	0	397	397	56
MIDLAND HIGH SCHOOL	KAMPALA	PRIVATE	212	165	377	57
ST JOSEPH'S GIRLS, NSAMBYA	KAMPALA	GOVERNMENT	1	375	376	58

ST MARY'S SS KITENDE (ANNEX)	WAKISO	PRIVATE	212	162	374	59
BULO PARENTS SS	MPIGI	GOVERNMENT	185	187	372	60
SEETA H/S GREEN CAMPUS MUKONO	MUKONO	PRIVATE	171	201	372	61
BISHOP'S SS MUKONO	MUKONO MC	GOVERNMENT	217	152	369	62
KIGEZI HIGH SCHOOL	KABALE	GOVERNMENT	239	130	369	63
ST LAWRENCE HS NABBINGO	WAKISO	PRIVATE	140	228	368	64
ST JOSEPH'S SS, NAGGALAMA	MUKONO	PRIVATE	164	202	366	65
ST PETER'S SS, NAALYA	WAKISO	GOVERNMENT	184	177	361	66
CALTEC ACADEMY MAKERERE	KAMPALA	GOVERNMENT	201	159	360	67
ST MARY'S SS KITENDE (ANNEX)	WAKISO	PRIVATE	204	155	359	68
IGANGA SECONDARY SCHOOL	IGANGA	PRIVATE	122	237	359	69
CENTRAL COLLEGE, MITYANA	MITYANA	PRIVATE	210	146	356	70
MUNTUYERA HS KITUNGA	NTUNGAMO MC	GOVERNMENT	349	1	350	71
MIGADDE COLLEGE BOMBO	LUWEERO	PRIVATE	172	176	348	72
MITYANA SS	MITYANA	GOVERNMENT	166	175	341	73
KAWANDA SS	WAKISO	PRIVATE	170	169	339	74
NAMAGABI SS	KAYUNGA	GOVERNMENT	195	143	338	75
ST ANDARD COLLEGE NTUNGAMO	NTUNGAMO	PRIVATE	189	147	336	76
RUBAGA GIRLS' SCHOOL	KAMPALA	GOVERNMENT	5	329	334	77
ST MARIA GORETTI SS KATENDE	MPIGI	GOVERNMENT	119	215	334	78
BAPTIST HIGH SCHOOL KITEBI	KAMPALA	PRIVATE	144	180	324	79
MARYHILL HIGH SCHOOL	MBARARA	GOVERNMENT	0	322	322	80
MT ST MARY'S NAMAGUNGA	MUKONO	GOVERNMENT	1	320	321	81
CRESTED SS KAMPALA	KAMPALA	PRIVATE	169	148	317	82
NAMIRYANGO SS	KAMPALA	PRIVATE	141	169	310	83
ST LAWRENCE CITIZEN HS HORIZON	WAKISO	PRIVATE	2	307	309	84
JINJA PROGRESSIVE SS	JINJA	PRIVATE	192	113	305	85
KYADONDO SS	WAKISO	PRIVATE	145	158	303	86
NAMUGOONA PARENTS SCHOOL	KAMPALA	PRIVATE	157	143	300	87
WANYANGE GIRLS SCHOOL	JINJA	GOVERNMENT	0	297	297	88
ST KALEMBA SS	KAYUNGA	PRIVATE	126	167	293	89
CITIZEN'S SS	IBANDA	PRIVATE	140	152	292	90
MENGO SS ANNEX	KAMPALA	GOVERNMENT	145	142	287	91
ST LAWRENCE SS SONDE	MUKONO	PRIVATE	150	134	284	92

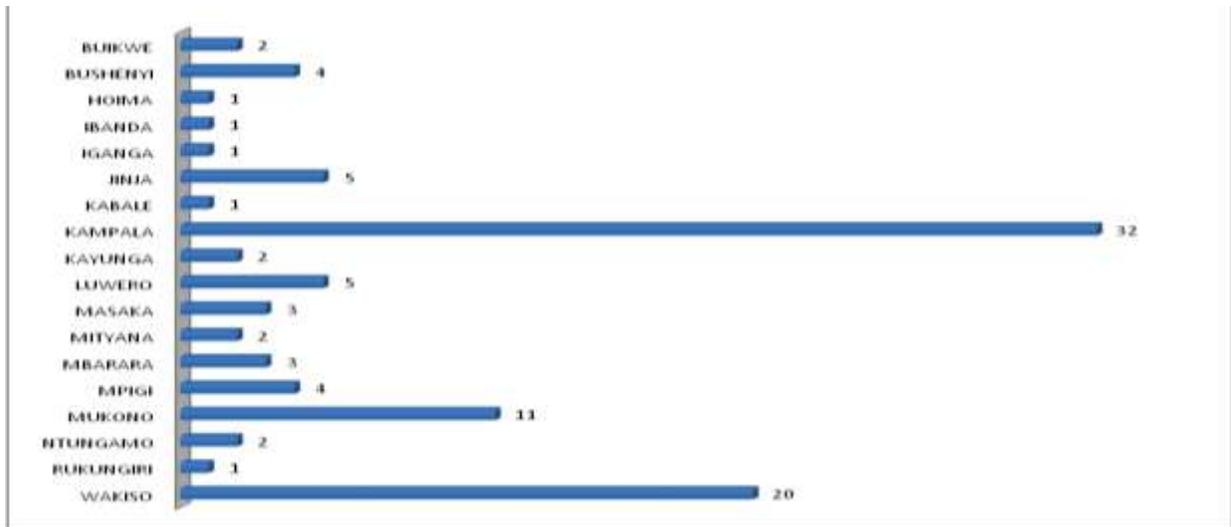
LUBIRI SS (ANNEX)	KAMPALA	PRIVATE	140	143	283	93
BLESSED SACREMENT SS KIMAANYA	MASAKA	PRIVATE	126	147	273	94
BUSOGA COLLEGE MWIRI	JINJA MC	GOVERNMENT	273	0	273	95
ST HENRY'S COLLEGE, KITOVU	MASAKA	GOVERNMENT	183	88	271	96
MPOMA SCHOOL	LUWEERO	PRIVATE	0	263	263	97
UGANDA MARTYRS' HS RUBAGA	KAMPALA	PRIVATE	139	120	259	98
SSAKU SEC SCHOOL	LUWEERO	PRIVATE	118	140	258	99
JINJA SECONDARY SCHOOL	JINJA	GOVERNMENT	176	82	258	100

Figure 7.1 below provides a summary of the percentage of the top 100 secondary schools located in each of the four regions of Uganda:



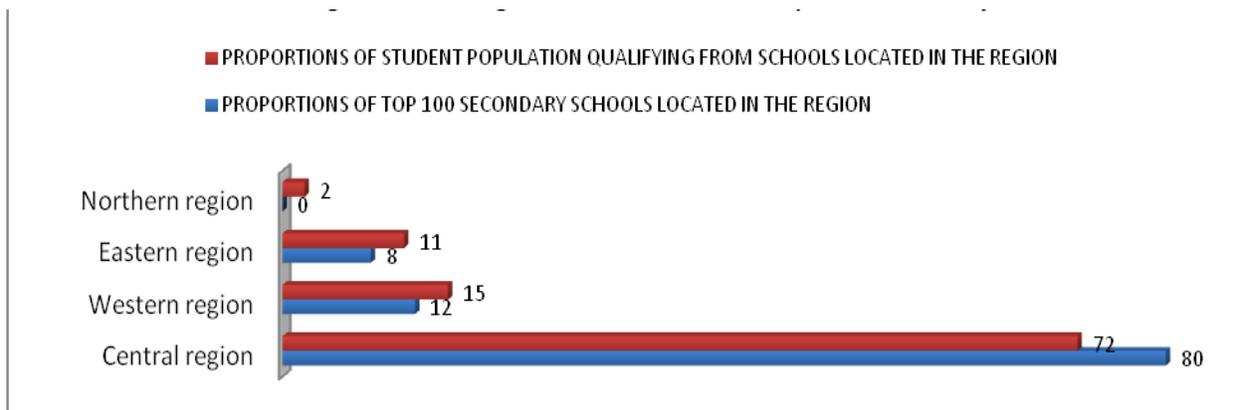
**Figure 7.1: Percentage distribution of the top 100 high school in Uganda by region**

The proportional distribution of the top 100 secondary schools by region ranged from 80 per cent in the central region to 12 per cent in the west, eight per cent in the east and zero percent in the north. The central region had eight out of every 10 top secondary schools in the country, demonstrating a narrow secondary school and geographic base in the public university student population of Uganda. Figure 7.2 below illustrates the distribution of the top 100 secondary schools in Uganda by district:



**Figure 7.2: The distribution of the top 100 secondary schools in districts of Uganda by number**

All top 100 secondary schools were located in 18 districts (15.8 per cent of all districts in Uganda), the majority (73 per cent) in five districts, of which 32 per cent were in Kampala, 20 per cent in Wakiso, 11 per cent in Mukono, and five per cent in Luwero and Jinja districts respectively. As Figure 7.2 below shows, the proportions of the students qualifying from the high schools located within each region was consistent with the proportions of the location of the top 100 secondary schools in the region of district location.



**Figure 7.3: Proportions of students who qualified from schools located by region of origin versus region of location of top 100 secondary schools**

The analysis showed that the secondary school hierarchy, which provided the pipeline for access to public university education in Uganda, was indeed, dominated by a few top secondary schools in the country, as was reported in FGDs and interviews. It also confirmed participants' perceptions that the base of the secondary school system, which the public university educational distribution system relied on to fill undergraduate programmes for public university education in Uganda, was too narrow and heavily skewed towards a few locations in the country. In the analysis of school level data, the study found that up to 72 per cent of the student population admitted to five public universities from 2009 to 2017 qualified from high schools located in the central region of Uganda, where 80 per cent of the top 100 high schools are located. Ninety-one out of every 100 students qualified from high schools located in 20 out of 114 districts. The two districts of Kampala and Wakiso accounted for 50.1 per cent of the total student population. Sixty-eight per cent of the total student population originated from the two districts. Seventy five per cent of the top 20 districts where the best secondary schools are located are in the central and western regions of the country, with 91 out of every 100 students qualifying from high schools located in 20 out of 112 districts. Of these, Kampala and Wakiso districts accounted for 50.1 per cent of the total student population in public universities.

Once again, the above results clearly showed that students were afforded “*multifaceted access to social phenomenon*” depending on their high school (Mamo, 2005: 358). This demonstrates a clear link between the concept of social position of one's high school and that of equity distance .i.e. the relative level of ease or difficulty of access to public university educational opportunities in Uganda. It proves that social positioning counts in access to quality education; and confirms the significance of feminist Standpoint empiricist's notion that knowledge production and access to resources such as public university education is historically, socially and culturally situated; and varies depending on the extent of epistemic advantage rendered to epistemic agents in specific locations or high schools (Intemann, 2010). Moreover, this notion of epistemic advantage or privilege turned out true in as far as access to public university educational opportunities in regions and districts of Uganda was concerned.

When challenged to justify why the concentration of the student population in a few top high schools was viewed as an issue, participants referred to a phenomenon reflected in this study as

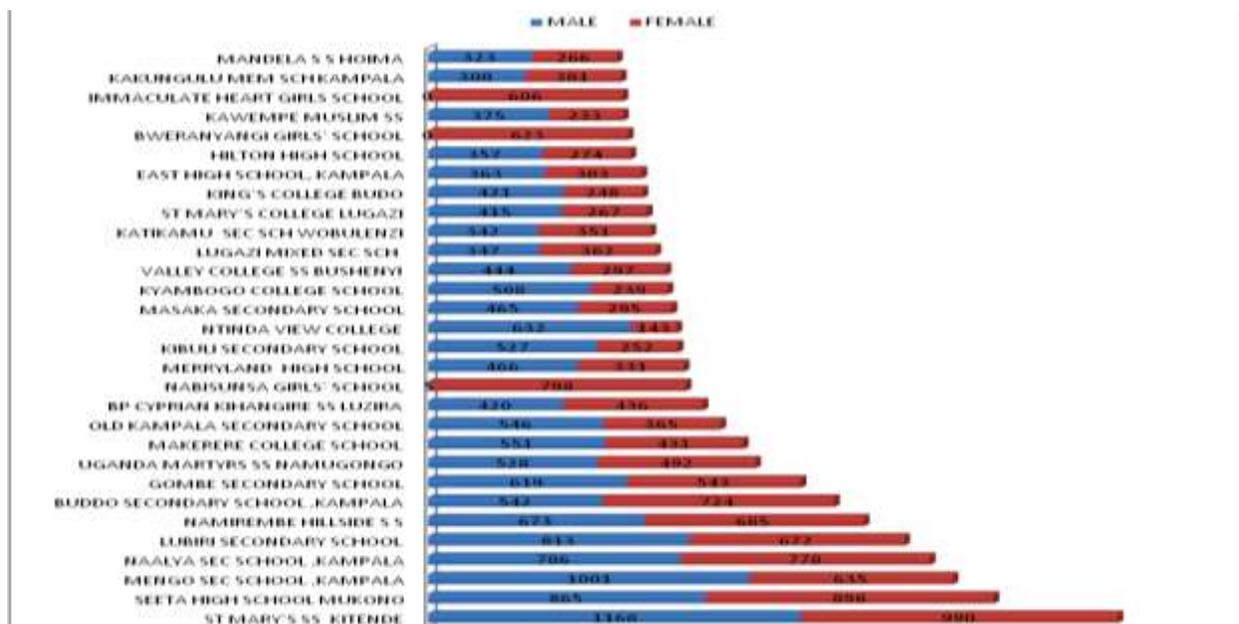
“the secondary school systems gap”. This was used to represent the perception that the hierarchy of the top secondary schooling system has evolved into a structural governance issue for the distribution of education; and that it was to account for the variations in the student population from one region of the country to another. To verify this claim, the study investigated the proportion of student population who qualified from high schools located within each district and region of the country. As the findings demonstrate, there was a clear secondary school systems gap in the country. In the north of Uganda, the proportion of students who qualified from high schools located in the region was found to be only 1.4 per cent, compared to 10 per cent of total uptake whose home districts were in the region. Out of every 10 students selected for public university education from Northern Uganda from 2009 to 2017, nine qualified from high schools located outside the region. Although the extent of this gap was not the same extent, a similar trend was observed in Eastern Uganda. For every 10 students whose home districts were in Eastern Uganda, six qualified from high schools located outside the region.

The narrow base of the secondary school system that dominated the distribution system demonstrates an emergence of a new secondary school hierarchy and the growing nature higher educational marginalisation. In other words, it reveals the role that geographical isolation plays in public university educational marginalisation, in the absence of public university educational distribution policies, systems and practices that take the concerns for equity of opportunities for all districts into account. This underscores the importance of the high school phenomenon in the context of the feminist Standpoint empiricism (Mamo, 2005; Intemann, 2010). Moreover, this notion of the high school factor turned out to be a key structural conundrum for public university educational marginalisation, as evidenced in the narrow geographic and demographic base observed in the public university student population observed across regions and districts of the country. It also underscores how national merit based systems of distribution can entrench inequality in the distribution of the benefits of quality education for men and women in the absence of adequate equity considerations.

### **7.3 The secondary school systems gap**

Access to the top secondary schools determined access to public university educational opportunities from one district of the country to another. The top secondary schools influenced

the levels of relative ease of student access to the different fields of study, playing a key role in public university educational marginalisation. Of a total of 1 178 schools that accounted for a student population of 101 504 over the eight years, 2 150 (2.1%) students were qualified from one secondary school – St Mary’s Secondary School Kitende. This was in contrast to a total of 733 out of 1 178 secondary schools in the country, which accounted for only 2 203 students. The proportion of students who had access to public university educational opportunities as a result of their access to St Mary’s Secondary School Kitende matched those who did so from 733 schools, representing 62 per cent of all secondary schools that accounted for the total. This example further elucidates the phenomenon referred to earlier as the secondary school systems gap – the reliance by the public university admission system on a limited number of high schools in the country. The majority of these are private schools, with excessive levels of relative ease of access to public university educational opportunities at the expense of poor and remote rural community schools. Cumulatively, the best school among the top 100 was St Mary’s Secondary, Kitende. Figure 7.4 below shows the 30 best schools from the top 100, with their public university student population from 2007 to 2017.



**Figure 7.4: Number of public university student population who qualified from the top 30 secondary schools by gender**

The top 100 secondary schools accounted for 54.6 per cent of all access opportunities to public university education from 2009 to 2017, with 70 per cent of students originating from schools in

the three districts of Kampala, Wakiso and Mukono and four per cent each from schools in Bushenyi, Mpigi and Luwero districts. Altogether, 82 per cent of student went to schools in five districts, all but two were in Central Uganda. While the districts of Buikwe, Jinja and Mbarara contributed two per cent of students each, Ibanda, Hoima, Kabale, Iganga, Rukungiri, Ntungamo, Mityana and Kayunga had one per cent each.

## 7.4 The Hierarchy of the secondary school system

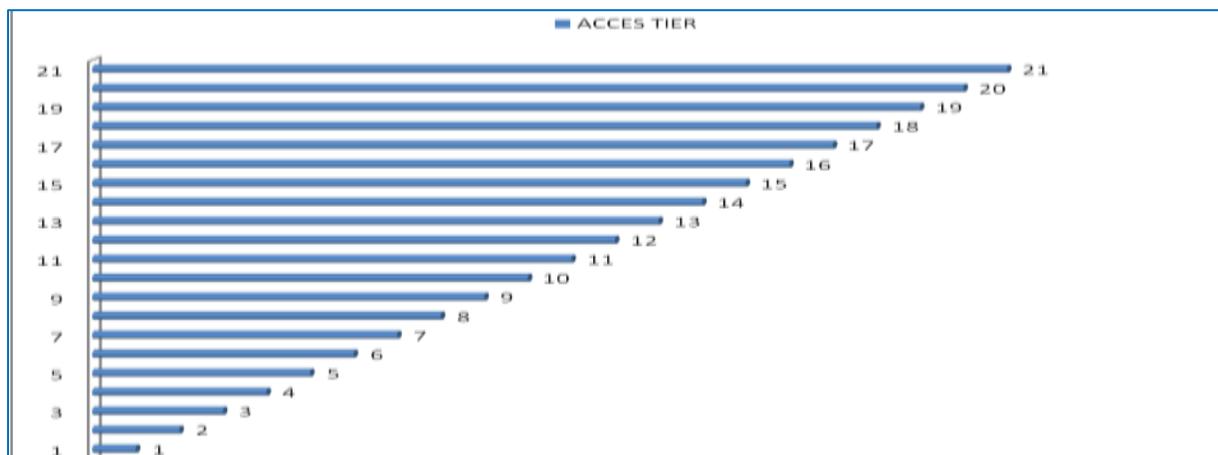
Based on results of a ranking of process that involved 1 178 secondary schools that accounted for the public university student population of 101 504 over the eight years, a hierarchy of the secondary school system emerged. This illustrates how a top echelon of the secondary school system has evolved to influence the public university educational distribution policy and system in the country. Table 7.2 below illustrates 21 hierarchies of the secondary school system formulated to represent the access tiers or pipeline for public university educational opportunities in Uganda from 2009 to 2017:

**Table 7.2: Twenty-one hierarchies of the secondary school system for public university educational opportunities in Uganda from 2009 to 2017**

ACCESS TIER	NUMBER OF SCHOOLS INVOLVED	RANGE IN THE NUMBER OF STUDENTS ADMITTED TO PUBLIC UNIVERSITIES
Access Tier 1	9	1001-2500
Access Tier 2	4	901-1000
Access Tier 3	6	801-900
Access Tier 4	9	701-800
Access Tier 5	11	601-700
Access Tier 6	15	501-600
Access Tier 7	31	410-500
Access Tier 8	43	301-400
Access Tier 9	90	201-300
Access Tier 10	28	100-200
Access Tier 11	13	91-100
Access Tier 12	13	81-90
Access Tier 13	25	71-80
Access Tier 14	38	61-70
Access Tier 15	30	51-60
Access Tier 16	53	41-50
Access Tier 17	88	31-40
Access Tier 18	152	21-30
Access Tier 19	277	11-20
Access Tier 20	642	2-10

Access Tier 21	226	1
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Figure 7.5 below shows the 21 layers of the hierarchy in the secondary school access system:



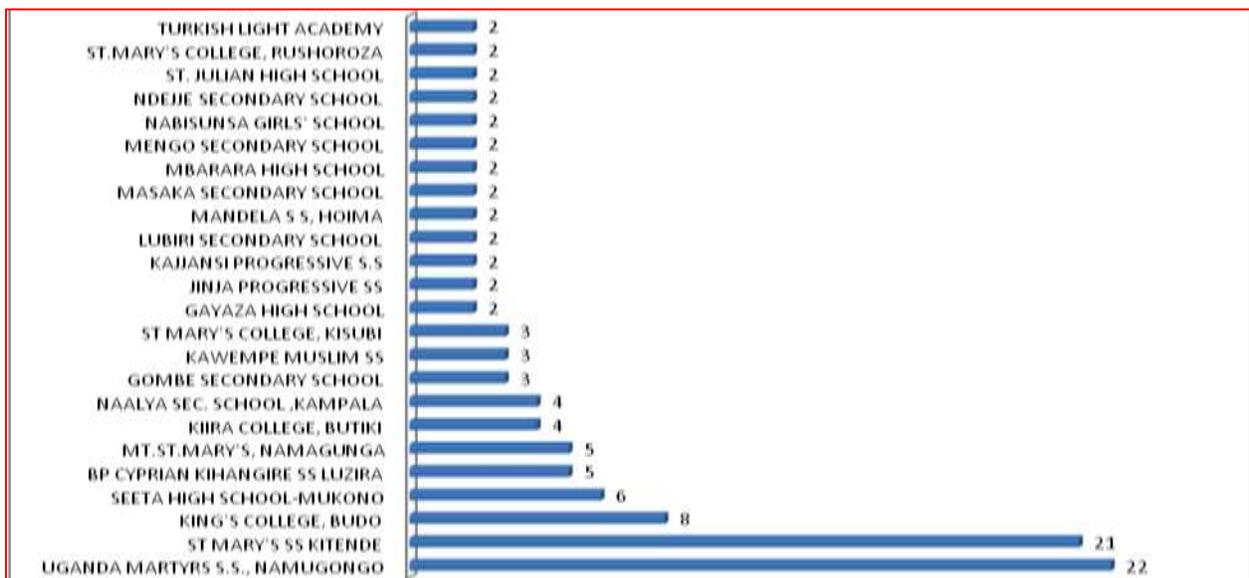
**Figure 7.5: The 21 high school hierarchy of public university access system/pipeline**

The hierarchy illustrates the concept of the access pipeline for public university educational opportunities in the country. The extent of control over access to public university educational opportunities varies from one level of the hierarchy to another. The extent of control over access to public university educational opportunities in the different fields of study also varies from one level of the hierarchy to another. All top 115 secondary schools in the country fell within access tiers 1-7. In the most exclusive tier one, was St Mary’s Secondary School Kitende, the leading high school in the country in terms of access to public university educational opportunities. As earlier observed, the proportion of students who had access to public university educational opportunities as a result of their prior access to St Mary’s Secondary School Kitende matched those who did so from a total of 733 schools. How possible is it that one secondary school accounts for more than 733 schools, representing 62 per cent of all secondary schools, can achieve in eight years?

There were 226 schools in access tier 21. Only one student per school in this tier had access to a public university opportunity over the eight-year period. Tier 20, the largest of all, had a total of 642 schools. The number of students with access to public university opportunities in this tier ranged from two to 10. In tier 19, there were 277 schools, with an opportunity range of 11-20 students per school, followed by tier 18 of 152 schools with a range of 21-30 opportunities each,

tier 17 of 88 schools with opportunity range of 31-40 and tier 16 of 53 schools in the range of 41-50 opportunities per school. In tier 15, there were 30 schools in the range of 51-60 opportunities. Tier 14 of 38 schools had a range of 61-70 opportunities, tier 13 of 25 schools were in the range of 71-80 opportunities and tier 12 of 13 schools in the range of 71-80 opportunities. In tier 11, there were 13 schools in the range of 81-90 opportunities and tier 10 of 28 schools from 91-100 opportunities each. Tier nine of 90 schools ranged from 100 to 200 opportunities; tier eight of 43 schools ranged from 201 to 300 opportunities; tier seven of 31 schools were in the range of 301-400 opportunities; tier six of 15 schools were in the range of 401-500 opportunities; tier five of 11 schools were in the range of 501-600 opportunities; tier four of nine schools were in the range of 601-700 opportunities; tier three of six schools were in the range of 701-800 opportunities; in tier two were four schools in the range of 801-900 opportunities and, in tier one, nine schools were in the range of 1 000 opportunities and above. The top tier (tier one) schools were all in the three districts of Kampala, Wakiso and Mukono.

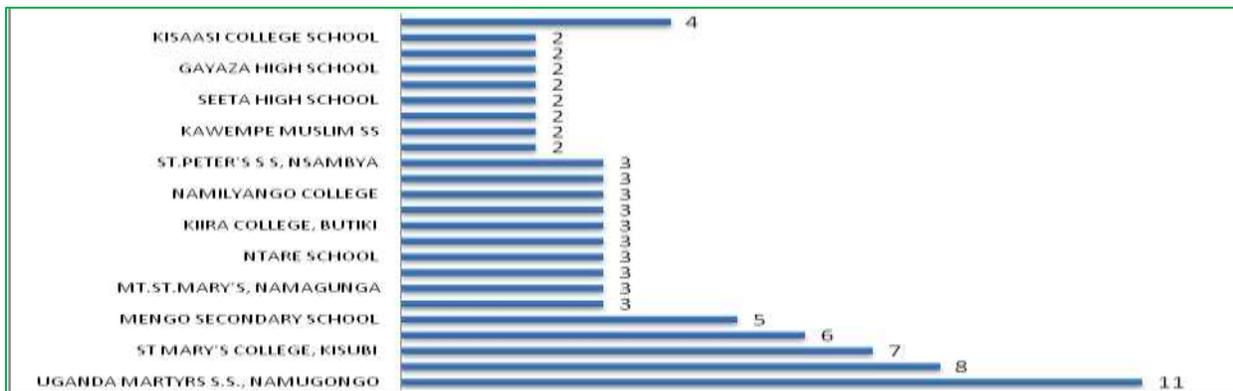
The hierarchy also determined access to the top fields of study at public universities and colleges. Eighty-two point three (82.3) per cent of the student population in the field of Bachelor of Medicine and Bachelor of Surgery in the class of 2017 was from 23 top secondary schools. Figure 7.6 below shows the distribution pattern of students of Bachelor of Medicine and Bachelor of Surgery by their feeder secondary school system:



### **Figure 7.6: The access pipeline or secondary school systems for Bachelor of Medicine and Bachelor of Surgery**

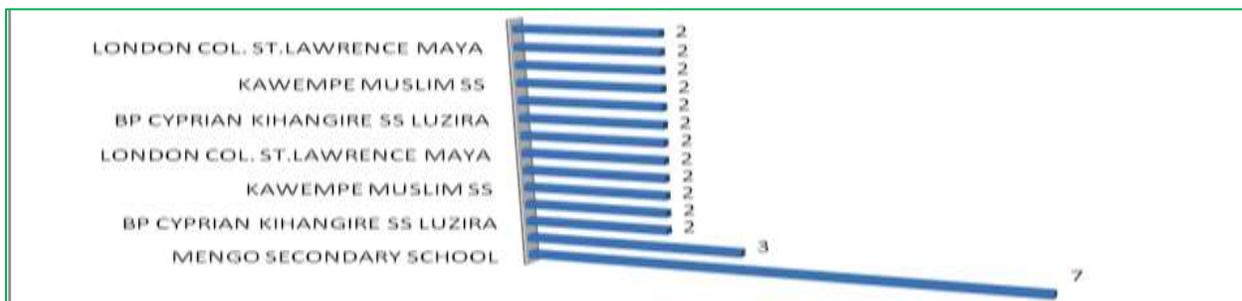
Out of 137 students of Bachelor of Medicine and Bachelor of Surgery from 50 secondary schools in the 2017 class, one in four (24.1 per cent) were from two top secondary schools – Uganda Martyrs SS, Namugongo and St Mary’s SS, Kitende. For the 23 secondary schools that accounted for 82.3 per cent, 13 schools sent two students each; three accounted for three each, two for four each, one for six, one for eight, one for 21 and another for 22 respectively. Seventeen (74%) of the 23 top feeder schools for Bachelor of Medicine and Bachelor of Surgery were located in Kampala and Wakiso districts. Five (3.6%) were in each of the districts of Jinja, Bushenyi, Hoima, Masaka and Mbarara respectively.

Up to 37.3 per cent of the student population in the field of Bachelor of Science in Agriculture in the class of 2017 was from five top secondary schools. Of these, six (12 per cent) out of 51 were from Gombe Secondary School in Wakiso district. With the exception of Gombe Secondary School, no significant variation was observed among the other 38 top feeder secondary schools for Bachelor of Science in Agriculture in 2017, with one student each from 32 schools, and three schools with two students each, one with three students, one with four students and one with six students. Bachelor of Science in Civil Engineering had 134 students from 71 schools. Sixty-five per cent of the student population came from 25 secondary schools. As Appendix 8.8 shows, the top secondary schools in the field of Bachelor of Science in Civil Engineering were Uganda Martyrs SS, Namugongo (11 Students) and St Mary’s SS, Kitende (eight), St Mary’s College, Kisubi (seven), Kings College Budo (six), Mengo Secondary School (five) and Seeta High School, Mukono. Of the 71 secondary schools, 47 accounted for one student each, eight with two, and 10 with three students each. In Bachelor of Science in Computer Engineering, 34.7 per cent of students in 2017 came from 16 schools, led by Mengo Secondary School with seven students or 15 per cent of the total (Appendix 8.9). In Bachelor of Science in Petroleum Geosciences and Production, 57.7 per cent of students came from 14 secondary schools. Figure 7.7 below shows the composition of feeder secondary schools for Bachelor of Science in Civil Engineering for 2017:



**Figure 7.7: The access pipeline or secondary schools systems for Bachelor of Science in Civil Engineering for 2017**

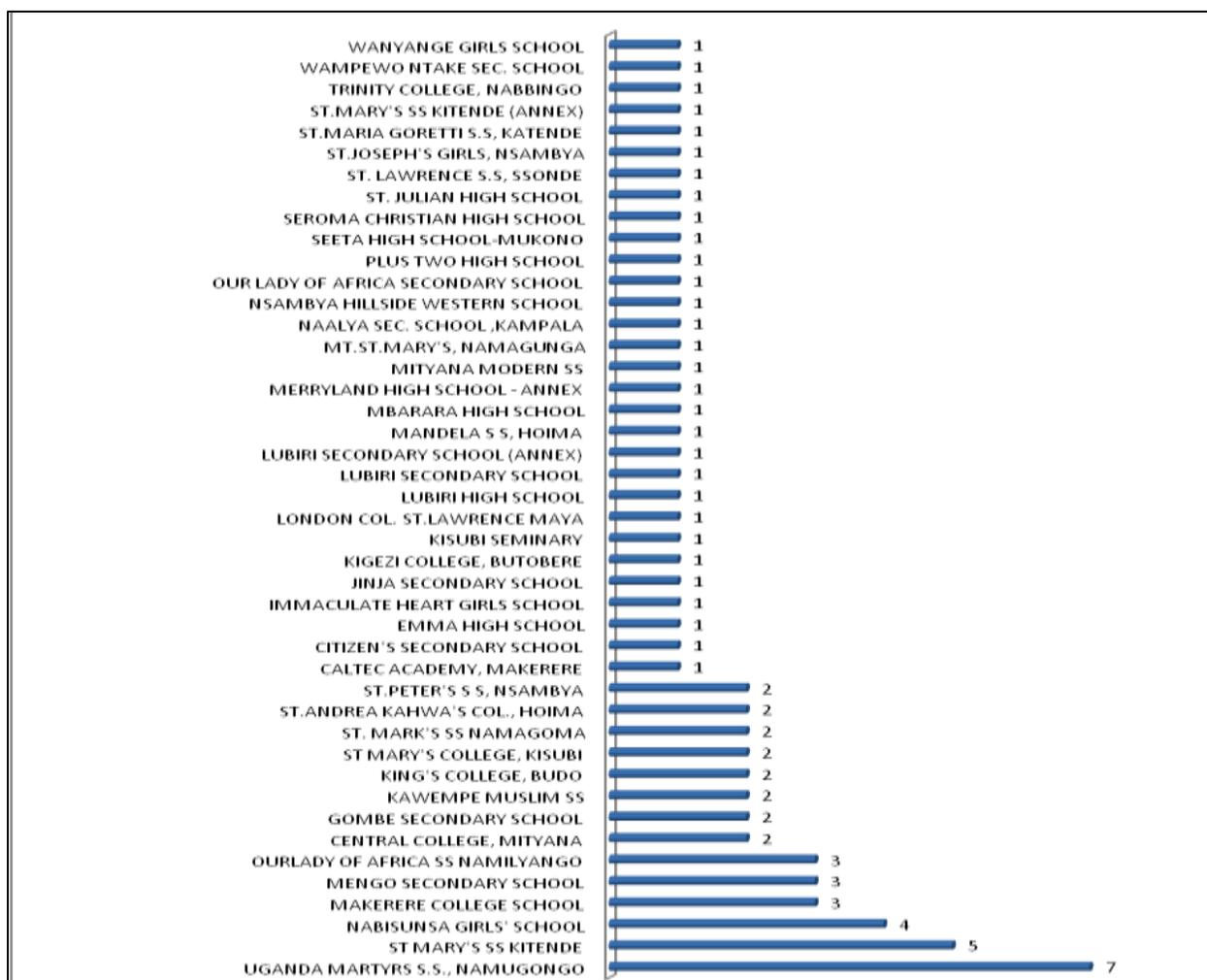
Figure 7.8 shows the top 16 secondary schools for Bachelor of Science in Computer Engineering:



**Figure 7.8: The access pipeline or secondary schools systems for Bachelor of Science in Computer engineering for 2017**

The access pipeline was concentrated in districts where the top secondary schools were located. These were also districts in which levels of relative ease of access to a public university educational opportunity was highest. Two main reasons were put forward by respondents: (a) the top secondary schools produced the best students in exams; (b) entry to the best high schools was considered the prequalification for individual merit system of admission.

Figure 7.9 shows the top secondary schools for Bachelor of Science in Petroleum Geosciences and Production in 2017:



**Figure 7.9: The access pipeline or secondary schools systems for Bachelor of Science in Petroleum Geosciences and Production**

*The top high schools offer a real heads-start for excellence in the national entry examinations and for admission into public universities under the national merit system” (Joan, from interviews). “The students in these schools have much higher levels of access to academic resources than their counterparts from disadvantaged areas. They enjoy unmetered access to some of best school facilities available. These schools have more funding to attract and retain the best-qualified and experienced teachers, and provide the books, learning opportunities and technologies. All these offer their students a competitive edge or advantage in the national merit system (Interjected by Emerald, from interviews).*

As a result, access and participation in higher education appeared to be more of a factor of one's high school than superior merit. This may imply that the definition of merit was not necessarily based on a formula that rewards real talent or hard work, but epistemic advantage or privilege, defined by the type or social position of one's high school. Apparently, this has led to;

*a secondary school systems gap-----a monopoly of a few high schools where access to a public university qualification is guaranteed, with a widening secondary school systems gap as a consequence (Xavier, from interviews). The secondary schools systems gap has driven parents into a phenomenon where the relatively well off seek to move students out of their own districts of origin in search of an ideal school system in the top echelons of districts of Uganda (Eva, from interviews). The ideal schools is offered by those top high schools that present greater opportunities for distinctions in national examinations, hence the reward and motivation for higher education (Nora, from interviews).*

## **7.5 Discussion**

The national merit system appears to place significant limits on the poor, due to the influence of the phenomenon of the high schools. A top down secondary school hierarchy has evolved over the years. This has become an indispensable element of the official distribution system for the public university education in Uganda. All public universities, without exception, have increased their reliance on this hierarchy to fill under graduate programmes. This is problematic, given that the high schools factor is structural cause of the narrow base of the student population identified in the public university educational distribution system. The reason is not that the high schools are themselves the problem. It is in the fact that the system limits its selection process to the same echelon of the top high school system in the country every year. The high school factor therefore provides the justification for a selection system or practice, which affects and thus confuses or obstructs the desired aim of the country's national merit system. This is due to several factors as discussed in interviews. Key among these is the failure by the state to invest adequately in public schools. This has led to a few private secondary schools becoming the centres of excellence and the models for public university educational distribution in the country. There is also the neglect of the culture of traditional public secondary schooling in the country.

This, in part, was attributed to the growth in the culture of private schooling and the subsequent poor reputations of most public schools in exams. The confluence of these factors explains the position in which most of the old secondary schools find themselves. It creates the public notion that the old schools that were once renowned for academic excellence were no longer considered good enough, in spite of educating the majority of Uganda's children in the 1960s and 1970s.

The high schools factor was reportedly perpetuating a pattern of repeated intergenerational choices of underclass schools by poor parents and students in marginalised communities. This entrenches a vicious cycle of cause and effect, which condemns children from poor districts to a lower quality education, with less opportunity for higher education and social mobility. This was noted to be the case in remote districts given the concern that it was the high school phenomenon, not individual merit, as defined in the national merit admission system, which dictated the level of relative ease or difficulty of access to public university educational opportunities.

To illustrate the role of the high schools factor in the distribution system, 62, 2 per cent of secondary schools in the country only accounted for 2.2 per cent of the public university student population from 2009 to 2017. This is in comparison to a single secondary school (Saint Mary's Secondary School, Kitende) that was responsible for 2.1 per cent of the student population. It is this widening high school gap in the quality of secondary schooling that participants observed as the root cause of public university educational marginalisation. The school gap also revealed the cause and effect relationship between the public university educational gap and the distribution system. It highlights the vulnerability in the national merit system as a backward political philosophy where admission is a reward for privilege, not talent.

The concentration of the access control systems in a few top high schools, has given rise to an exclusive secondary school system. "The consequence is the growing public university educational gap between regions and districts of the country" (Mark – not real name, from personal interviews). Several reasons were provided from interviews and focus group discussions. First was the lack of control by the state over the role, functions and implications of the new secondary school hierarchy in the distribution policies, systems and practices at national level. Then the absence of a fair system of distribution for quality education from primary to

secondary school level-the inadequate measures to ensure secondary schools – especially private schools – are taking steps to embrace equity and diversity for the poor at the top echelons of the secondary school system.

The evolving hierarchy presents the need for systems reform-the demand for a system “of social equilibrium to address systemic equity disparities”, based on the high school phenomenon (Albert – not real name, from personal interviews). It calls attention to the need for greater emphasis in tackling structural disadvantages, with individual hardships or school based factors being taken into account in evaluating the eligibility of applicants for public university admission as well as in the admission practices for lower and upper secondary education system. Participants argued repeatedly on the point that the confounding effect of the high school factor in the admission system must be addressed at all levels. This is what gives students from top secondary schools epistemic advantages that are specific to the context of their high schools.

Looking at the pattern of distribution of public university intake, the hierarchy of the secondary school system has disproportionately altered the intent of the public university distribution policy at national level. Consequently, over the years (as participants pointed out), the distribution of secondary schooling and public university education has become less of a central government function and more of a private affair. In fact, public policy has had little to do with who gets access to the limited quality education and public university educational opportunities in the country and who does not.

The privatisation of the merit based system, in effect, entrenches the position of a handful of high schools that dominate tertiary intake, since it is these top schools that have the resources to produce the top 4 000 students in exams who get admitted to public universities under the Ugandan government sponsorship programme. The phenomenon of the high school factor means that public universities simply seek the highest performers to populate their undergraduate courses. Admission has become a system to bestow honor instead of rewarding superior merit. Admission is not understood in the contexts of the country’s demographic and geographical dynamics.

Existing beliefs about how to pass examinations in order to obtain a public university educational

award in Uganda were identified in interviews and discussions as a factor that has contributed to the support for the growing culture of the high school phenomenon, and to it being perceived as superior to the significance of the notion of equity in public policy. Whilst officially no single school was seen as superior in the public university educational distribution before the 1980s, today there is a deeply held belief amongst the public that a few schools are the best options to obtain public university educational access passes. For this reason, there was concern that public universities and the top secondary schools in the country no longer benefit top students from less competitive backgrounds, schools and districts, but students from more competitive areas of the country. This has rendered less-funded, less competitive schools where the majority of children from marginalised areas are enrolled at a disadvantage. Critics of the private school system argued in interviews that the private school system does not add value to the ethnic diversity of Uganda because admission does not take into account the ethnic segregation of the country.

The perception from interviews and discussions showed that the distribution policy and practices for secondary schools and public universities has led to the notion that schools in Kampala and Wakiso districts are the only sources of the country's academic excellence. This has created a high school-class-based model of a secondary and public university distribution system, which makes the student population in the top secondary schools and public universities less diverse. The narrow secondary school base of student population suggests that there must be a plan to deal with the distribution policy in secondary schools as this is a key structural determinant of disadvantage for public university access. Addressing this from all levels of the education system can make public institutions of learning yield greater diversity dividends for the whole country in the long run (Alon, 2011).

The admission philosophy in which public university opportunity is assigned according to the individual's academic merit was challenged for a number of reasons. It was argued that the system has contributed significantly to Equity Gaps observed across schools, regions and districts in the country. Due to significant variations in socio-economic backgrounds, students cannot be solely assessed on a narrowly defined weighted criterion, which is no longer viewed by many as the legitimate way to determine the distribution of human capital investment in the country. For this reason, it was reported that the system tends to favour those at the top of

society. The issue of the dominance of a few high schools was therefore identified as a priority for policy consideration. Policy makers were encouraged to ensure that more prominent forms of social action were considered to expand the narrow high school base in the student population in public universities across the country and address the imbalances in the distribution of the public university student population to ensure it represents the entire geography and demographic characteristics of the country. This requires policies and practices that promote a more inclusive and comprehensive national educational distributional system.

It was pointed out that an overemphasis and reliance by the system on the top schools of the secondary school system puts the goals of equity and equality in jeopardy. This leads to the concentration of opportunities in the hands of a few. The academic stereotyping of over and underachievers without the consideration for differences in the quality of schooling was found to marginalise poor and remote districts of the country (Aronson, 2002). It was emphasised that little would be achieved in dealing with the challenges of inequity, imbalances and underdevelopment without the consideration for a fairer system, for distribution of the student population in the top secondary schools for all districts in all parts of the country. This requires more prominent forms of social action or policy; in evaluating the eligibility of applicants, the district factor and the high school phenomenon must be taken into account; and for secondary school and public university education, the best candidates for admission should be those students with the highest academic weight from each district. These recommendations take into account the role of individual district hardships and the high school factors. It also recognises that schools, colleges and universities have the obligation to pursue scholarly excellence as a civic good and that the objective of the distribution policy should be to ensure a well balance approach in all fields of study for all districts and purposes of development.

To avoid the risk of addressing the issues of the relatively well off without including the realities of communities who suffer from economic disadvantage and marginalisation, it was concluded that access to the limited public university educational opportunities in the country cannot be defined by individual privilege. It is recommended that (a) the country's geographical and demography features be taken into account to ensure that access to the top tiers of the secondary schools system is determined equitably; and (b) that guidelines be put in place to

ensure that the student population in the top secondary schools represents the geographic and demographic diversity of the country they are meant to serve. According to Barr (2004), equity is not free education. It is “a system in which no one who meets the first criteria is denied a place because he or she comes from a disadvantaged background” (Barr, 2004 p.266) (p. 266). It is concerned with the problem of inequality in allocating quality student population in regions and districts, where high schools and universities have a fixed number of seats available and where both private and public schools and universities act strategically to achieve a set equity goal and target in their student population over a given period of time. This requires ‘Fair Share’ to be taken into account as a primary consideration-with students eligible for admission under the national merit system being those qualified from schools located within each district and ranked in the top categories of performance across the district. Unlike the current system, this would require schools and universities to rely on eligibility standards that reward the talent and hard work of the vast majority of students who qualify from disadvantage schools located in remote regions and district of the country. It focuses attention on equity and equality in the distribution of educational opportunities as a resource, and tackles the far reaching implications of higher educational inequality for development. It safeguards opportunities for both privilege and disadvantaged groups (Salmi and Bassett (2014p. 365) to ensure that all members of society who meet the minimum level of qualification can participate in higher education (McCowan, 2007, p. 582), based on a moral discourse of national merit that reflects the notion of democratization of access to education, as embedded in the national legislative and policy framework. In the US, the New York City High School Match system applies a similar philosophy. The EdOpt Schools are required to reserve 50 per cent of their seats as quotas for top, middle, and bottom performers (Abdulkadiroglu et al. 2005; Abdulkadiroglu and Sonmez, 2003; Abdulkadiroglu, 2010; Ehlers, 2010; Kamada and Kojima, 2010; Westkamp, 2011). In China, quotas are set by universities to promote minority student intake (Niu & Wan, 2018). In Israel, structural disadvantages, such as students’ socioeconomic status and high school, are taken into account when admitting students in the four most selective universities in the country. This has made the four most selective universities in Israel more diversified (Alon, 2011). In Finland, quota systems exist for certain university programmes. In France, students from schools in poor neighborhoods benefit from special policies in certain institutions. In Nigeria, a ratio 25 per cent is reserved for less developed areas (Obielumani, 2008; Ogbonnaya, 2009; Omeje., Egwa and Adikwu, 2016).

## 7.6 Conclusion

Participants expressed concern in the absence of policies that emphasise either specific quotas or targeted goals to address district imbalance in the student population and in specific fields of study in all public universities. The consequence of this was identified in the practice in which admission to a public university is taken as though it was an honour for those at the top zenith of the academic scale. The secondary school and tertiary admission policy must therefore evolve to address increasing challenges of inequality in the distribution of educational opportunities. Exclusionary admission practices must be dealt with as a legitimate policy issue. Top secondary schools should not be left unchallenged to prove their competence for nation building and to promote the discourses of equity and equality. This suggests that a district-quota-based admission policy should be incorporated into the admission practices of the top secondary schools and the most selective university fields of study to make institutions of learning more accountable towards the goal of equity and diversity. Increasing the district and high school-base of the student population in these institutions has to be the goal of national policies that aim to increase diversity as a strategy to address the structural determinants of disadvantage and marginalisation in education. The notion of merit-based competition should always be applied in context and not at the expense of geographical and demographic disparities between regions and districts of the country. Policies that take the secondary school, gender, geographic, economic and demographic disparities into account and which increase opportunities for disadvantaged groups, need to be reprioritised.

Promoting equity and equality in tertiary education in Uganda will require secondary schools and public universities to work effectively to guarantee education of professionals in all districts, to produce skills required for local and nationwide needs. This calls for bridging the secondary school gap as a long-term strategy (Marginson, Kaur & Sawir, 2011) to enhance the potential of the long-term benefit of education in elevating the status of disadvantaged and marginalised districts to the benefit of the entire Ugandan society. Bridging the secondary school gap will combat a major structural challenge in public education (Watts, 2017) and in the key sectors of health, politics and economy in the long run (Afsar, 2010). As there is no correlation between one's high school and intelligence, current admission practices are condescending to some

districts since it implies those districts do not have students who meet the definition of national merit and can succeed in higher education. Therefore action needs to be taken to ensure fair policies and practices to address inequality in the educational distribution system that have tended to benefit primarily the most fortunate, often to the exclusion of the least fortunate. The next chapter examines the contribution of Uganda's Affirmative Action programme to women in public university education. In particular, it assesses what would have happened to women's representation in public university education in the absence of the 1.5 bonus intervention points of Affirmative Action policy.

# **CHAPTER EIGHT**

## **AFFIRMATIVE ACTION IN UGANDA’S PUBLIC UNIVERSITY EDUCATION**

What would have happened to women’s representation in public university education in Uganda in the absence of the Affirmative Action programme?

### **8.1 Introduction**

Following the incorporation of a gender-based Affirmative Action policy into the admission practices of public universities in Uganda in 1990, Ugandan women became entitled to 1.5 bonus intervention points for public university admission. From 1991, it became mandatory for public universities to consider complementary 1.5 bonus intervention points in assessing the eligibility of qualified women for public university admission. This chapter assesses the distribution of the public university student population admitted to five public universities in Uganda from 2009 to 2017 to examine the contribution of Affirmative Action to the gender agenda, in particular, to assess what would have happened to women’s representation in public university education in Uganda in the absence of the 1.5 bonus intervention points. The chapter analyses if and how Affirmative Action policy increased women’s access to public university educational opportunities in districts of Uganda and in public university fields of study critical to economic growth and development.

### **8.2 Location and Distribution of the beneficiaries of the Affirmative Action programme**

Table 8.1 below shows the distribution of the beneficiaries of the 1.5 bonus intervention points by regions of Uganda, based on enrolment data obtained from the admission list from five public universities for the class of 2015/2016 academic year:

**Table 8.1: The distribution of the beneficiaries of the 1.5 bonus intervention points by region**

REGION	PERCENTAGE SHARE OF BENEFICIARY
Central region	40.00
Eastern region	25.6
Northern region	8.40
Western region	26.00
<b>Total</b>	<b>100</b>

### **Empirical findings on the counterfactual effects of the 1.5 bonus intervention**

The pattern of the distribution of the benefits of the programme was visible along regional lines, with four out of every 10 beneficiaries coming from the central region of Uganda and nearly seven out of every ten from the two regions of Central and Western Uganda respectively. Table 8.2 below compares the number of students who would not have succeeded without the bonus points to those who would have, regardless of the 1.5 bonus intervention programme.

**Table 8.2: Comparison of the number of students who would not have succeeded without the bonus points**

DISTRICT	NUMBER OF STUDENTS WHO WOULD NOT HAVE MADE IT WITHOUT THE 1.5 BONUS POINTS	NUMBER OF STUDENTS WHO WOULD HAVE MADE IT WITHOUT THE 1.5 BONUS POINTS	PER CENT
Wakiso	60	25	19.2
Kampala	36	16	11.5
Kabale	16	4	5.1
Pallisa	14	14	4.5
Mukono	9	6	2.9
Kabarole	9	4	2.9
Tororo	9	1	2.9
Mbarara	8	4	2.6
Bushenyi	8	2	2.6
Mityana	6	4	1.9
Mbale	6	2	1.9
Masaka	5	5	1.6
Masindi	5	2	1.6

Mubende	5	0	1.6
Jinja	4	4	1.3
Gulu	4	3	1.3
Ntungamo	4	3	1.3
Luwero	4	2	1.3
Kamuli	4	1	1.3
Moroto	4	0	1.3
Kiruhura	4	0	1.3
Lira	3	8	1
Iganga	3	4	1
Sheema	3	3	1
Kanungu	3	2	1
Manafwa	3	1	1
Kayunga	3	0	1
Kiboga	3	0	1
Butaleja	3	0	1
Budaka	3	0	1
Serere	3	0	1
Buhweju	2	5	0.6
Kasese	2	3	0.6
Arua	2	2	0.6
Kyenjojo	2	2	0.6
Ibanda	2	2	0.6
Isingiro	2	2	0.6
Lyantonde	2	1	0.6
Kibuku	2	1	0.6
Kibaale	2	0	0.6
Kitgum	2	0	0.6
Nebbi	2	0	0.6
Sembabule	2	0	0.6
Amuria	2	0	0.6
Amuru	2	0	0.6
District 72	2	0	0.6
Maracha	2	0	0.6
Bududa	2	0	0.6
Soroti	1	3	0.3
Bukedea	1	3	0.3

Busia	1	2	0.3
Hoima	1	2	0.3
Kamwenge	1	1	0.3
Namutumba	1	1	0.3
Bukomansimbi	1	1	0.3
Kyankwanzi	1	1	0.3
Apac	1	0	0.3
Bugiri	1	0	0.3
Kaberamaido	1	0	0.3
Kumi	1	1	0.3
Mayuge	1	0	0.3
Sironko	1	0	0.3
Amolatar	1	0	0.3
Kaabong	1	0	0.3
Kaliro	1	0	0.3
Nakaseke	1	0	0.3
Butambala	1	0	0.3
Buvuma	1	0	0.3
Gomba	1	0	0.3
Lamwo	1	0	0.3
Lwengo	1	0	0.3
Mitooma	1	0	0.3
Ngora	1	0	0.3
Buhweju	0	2	0
Kalungu	0	2	0
Kanungu	0	1	0
Kisoro	0	1	0
Dokolo	0	1	0
Koboko	0	1	0
Kyegegwa	0	1	0
Rubirizi	0	1	0
<b>TOTAL</b>	<b>313</b>	<b>163</b>	<b>65.8%</b>

Table 8.2 above illustrates the distribution of the counterfactual effect of the 1.5 bonus intervention points on the public university female student population of the class of 2015 by districts of Uganda. It provides a summary of the number and the percentage of beneficiaries of the programme from each of the 112 districts of Uganda, based on Uganda's public university

admission list for the class of 2015/2016.

The impact of the 1.5 bonus intervention points of the Affirmative Action programme was clearly visible. The gender-based Affirmative Action policy benefitted women's representation in public universities in Uganda. The study identified 313 out of 476 women, from the 2015/2016 class, who would not have been selected for various academic programmes, had it not, been for the 1.5 bonus intervention points of the Affirmative Action programme.

### **Inter- and intra-categorical group differences among the beneficiaries of Affirmative Action programme**

The distribution of the beneficiaries of the 1.5 bonus intervention programme was fundamentally skewed. Nineteen-point-two (19, 2) percent of the benefits were concentrated in a single district (Wakiso) of the country. While the top 20 per cent of districts controlled 73 per cent of the benefits of the programme, the bottom 80 per cent controlled only 27 per cent. The 20 leading districts in terms of the proportions of the beneficiaries of the programme were Wakiso (19.2 per cent), Kampala (11.5 per cent), Kabale (5.1 per cent), Pallisa (4.5 per cent), Mukono, Kabarole, Tororo and Mbarara (2.9 per cent), Bushenyi and Mityana (2.6 per cent), Mbale (1.9 per cent), Mityana (1.6 per cent); Masaka, Masindi and Mubende (1.6 per cent), Jinja, Gulu, Ntungamo, Luwero, Kamuli and Moroto (1.3 per cent). Districts that recorded the lowest number of beneficiaries from the programme were those for which the programme was most needed.

Table 8.3 below shows the percentage of beneficiaries from 52 districts that were at the bottom of the beneficiary list of the programme in the class of the 2015/2016 academic year:

**Table 8.3: Proportions of beneficiaries of the 1.5 bonus points in the 52 districts of Uganda at the bottom of the beneficiary list**

<b>DISTRICT</b>	<b>NUMBER OF STUDENTS WHO WOULD NOT HAVE MADE IT WITHOUT THE 1.5 BONUS POINTS</b>	<b>NUMBER OF STUDENTS WHO WOULD HAVE MADE IT WITHOUT THE 1.5 BONUS POINTS</b>	<b>PER CENT OF BENEFICIARIES</b>
Buhweju	2	5	0.6
Kasese	2	3	0.6
Arua	2	2	0.6

Kyenjojo	2	2	0.6
Ibanda	2	2	0.6
Isingiro	2	2	0.6
Lyantonde	2	1	0.6
Kibuku	2	1	0.6
Kibaale	2	0	0.6
Kitgum	2	0	0.6
Nebbi	2	0	0.6
Sembabule	2	0	0.6
Amuria	2	0	0.6
Amuru	2	0	0.6
Kiruhura	2	0	0.6
Maracha	2	0	0.6
Bududa	2	0	0.6
Soroti	1	3	0.3
Bukedea	1	3	0.3
Busia	1	2	0.3
Hoima	1	2	0.3
Kamwenge	1	1	0.3
Namutumba	1	1	0.3
Bukomansimbi	1	1	0.3
Kyankwanzi	1	1	0.3
Apac	1	0	0.3
Bugiri	1	0	0.3
Kaberamaido	1	0	0.3
Kumi	1	1	0.3
Mayuge	1	0	0.3
Sironko	1	0	0.3
Amolatar	1	0	0.3
Kaabong	1	0	0.3
Kaliro	1	0	0.3
Nakaseke	1	0	0.3
Butambala	1	0	0.3
Buvuma	1	0	0.3
Gomba	1	0	0.3
Lamwo	1	0	0.3
Lwengo	1	0	0.3
Mitooma	1	0	0.3

Ngora	1	0	0.3
Buhweju	0	2	0
Kalungu	0	2	0
Kanungu	0	1	0
Kisoro	0	1	0
Dokolo	0	1	0
Koboko	0	1	0
Kyegegwa	0	1	0
Rubirizi	0	1	0
<b>TOTAL</b>	<b>313</b>	<b>163</b>	<b>100</b>

Eighty-point eight (80.8) percent of all 2015 beneficiaries of the programme were from 31.5 per cent (35 of 112) of districts of Uganda (Table 8.2). The central region of Uganda accounted for 40 per cent of the top 20 districts with 40 per cent of the beneficiaries of the Affirmative Action programme. Twenty-six per cent were from the west, 25.6 the east and 8.4 per cent from the north. Out of the total number of public university students of 101 546, only 10 per cent originated from the districts in Northern Uganda. Nine out of every ten qualified from high schools located outside the region. Only two (6.4 per cent) of the top 31 beneficiary districts of the Affirmative Action programme were located in Northern Uganda. However, there was no single district in Northern Uganda among the top 20 beneficiary districts of the bonus intervention programme. The benefit of the programme went to the districts at the top. The programme was more effective or beneficial in a few top and highly competitive districts of the country. It worked best in districts well known for their academic competitiveness and performance. Other than being implemented for redressing past and present discrimination, the 1.5 bonus intervention scheme appears to have been implemented for competitive reasons.

Without the bonus intervention points of the Affirmative Action programme, there would have been 33 districts (29.7 per cent of all districts) that would not have had a single woman admitted on a government-sponsored programme in which they were during the 2015/2016 academic year. While Kampala and Wakiso accounted for 50.1 per cent of the total student population that was admitted and 68 per cent of the total student population by district of origin, the two districts also accounted for 30.7 per cent of the beneficiaries of the Affirmative Action programme. This means that, for every 10 beneficiaries of the programme, almost four were from the two districts

of Kampala and Wakiso.

The higher the proportions of students qualifying from a district, the higher was the number of beneficiaries of the Affirmative Action programme. This explains why the districts in Northern Uganda had the least number of beneficiaries of the programme. In the north, the proportion of students whose schools were located in the region was only 1.4 per cent, compared to 10 per cent of total uptake whose home districts were in the region. This implies that the majority of the beneficiaries of the Affirmative Action programme from Northern Uganda also qualified from high schools located outside their districts and region of origin. The Affirmative Action programme was most effective in the two districts of Wakiso and Kampala (two out of 112 districts), where it made the biggest difference. It did not work in 40 districts (36 per cent) where there was no single beneficiary of the programme in the 2015/2016 class.

As illustrated, the results above, confirmed that the student beneficiaries of the Affirmative Action programme were afforded “*multifaceted access to social phenomenon*” depending on their districts (Mamo, 2005: 358). This demonstrates the counterfactual effect of location on the effectiveness of the Affirmative Action policy and programme. It clearly shows that location mattered as a social reality in the context of access to the benefit of the Affirmative programme; and that there was a clear link between one’s location and the relative level of ease or difficulty experienced with regard to access to public university educational opportunities. When probed for reasons why, it was observed that;

*The district and high school were key factors in access to the Affirmative Action programme given the circumstances of the national merit system in which the policy was implemented. This means that the 1.5 bonus intervention point programme was implemented for competitive reasons other than for reasons of promoting equity and equality in the public university education system (Gaby, from interviews).*

The study confirms the significance of the feminist Standpoint empiricist theory (Intemann, 2010) in the understanding of the policy efficacy of Affirmative Action. Moreover, the notion of epistemic advantage or privilege turned out true for the Affirmative Action programme as the feminist Standpoint theory provides; and in as far as, access to public university educational

opportunities in regions and districts of Uganda was concern.

### 8.3 Affirmative Action and the high schools phenomenon

Irrespective of the region or district of the country, the majority of the beneficiaries of the bonus intervention programme came from the best high schools in the country. Table 8.4 below provides a summary of the number of beneficiaries of the 1.5 bonus intervention points from the leading 20 beneficiary secondary schools in the country:

**Table 8.4: Number of beneficiaries of the 1.5 bonus intervention points from 41 top secondary schools in Uganda**

School	Number of students who would not qualify without the 1.5 bonus points	Number of students who qualified without the 1.5 bonus points	Per cent who would not have qualified without the 1.5 bonus points
ST MARY'S SS KITENDE	60	25	70.6
UGANDA MARTYRS SS, NAMUGONGO	19	12	61.3
MT.ST.MARY'S, NAMAGUNGA	18	12	60.0
GAYAZA HIGH SCHOOL	17	5	77.3
NABISUNSA GIRLS' SCHOOL	17	9	65.4
KING'S COLLEGE, BUDO	16	3	84.2
IMMACULATE HEART GIRLS SCHOOL	9	13	40.9
NAALYA SS KAMPALA	9	4	69.2
SEETA HS MUKONO	8	4	66.7
BUDDO SEC. SCHOOL	6	2	75.0
NDEJJE SECONDARY SCHOOL	5	1	83.3
BWERANYANGI GIRLS' SCHOOL	4	1	80.0
KAWEMPE MUSLIM SS	4	5	44.4
LUBIRI SECONDARY SCHOOL	4	1	80.0
MPANGA SS	4	2	66.7
SEETA HIGH SCHOOL	4	1	80.0
ST.MARY'S SS KITENDE (ANNEX)	4	1	80.0
CITIZEN'S SS	3	1	75.0
GOMBE SS	3	0	100.0
IGANGA SS	3	1	75.0

The top 10 beneficiary secondary schools by number of beneficiaries were Saint Mary's Kitende (60), Uganda Martyrs Namugongo (19), Mount St Mary's Namagunga (18), Gayaza High School (17), Nabisunsa Girls School (17), Kings College Buddo (16), Immaculate Heart Girls School (9), Naalya Secondary School Kamapla (9), Seeta High School Mukono (8) and Budo Secondary School (6). All these secondary schools but one – Immaculate Heart Girls School –are located in the two districts of Kampala and Wakiso.

The percentage of students that would not have made it from these top secondary schools ranged from 70.6 per cent in St Mary's Kitende, to 61.3 per cent from Uganda Martyrs Namugongo, 60 per cent from Mount St Mary's Namagunga, 77.3 per cent from Gayaza High School, 65.4 per cent from Nabisunsa Girls School and 84.2 per cent from Kings College Buddo (Appendices 8.5 and 8.6). Without the bonus intervention programme, 11 of the top 41 secondary schools would not have had a single woman admitted on a government-sponsored programme of their choice in 2015. These included Gombe Secondary School, Kigezi High School, Masaka Secondary School, St Bernadette Save, Hana Mixed School, Kajjansi Progressive, Kawanda SS, Marry Hill High School, St. Marks SS Namangoma, St. Kalemba Secondary School and St Mary's College Lugazi.

With the exception of Northern Uganda, the proportions of the distribution of the beneficiaries by region matched that of the distribution of the best high schools in the region. For instance, the central region of Uganda, which accounted for 40 per cent of the top 20 districts with the best high schools in the country also accounted for 40 per cent of the beneficiaries of the Affirmative Action programme. Access to the top high schools in the country confounded the benefit of the 1.5 bonus intervention points. In large part, the women who benefitted from the programme did so due to their prior access to a top high school. The western region, with 35 per cent of the top 20 districts with the best secondary schools in the country, had 26 per cent of the beneficiaries. The eastern region, with 25 per cent of the top 20 districts, had 25.6 per cent of beneficiaries.

Access to the top tier of secondary schools confounded students' access to the benefit of the 1.5 bonus intervention programme. The high school factor was the prequalification for individual merit and subsequently that of being a beneficiary of the 1.5 bonus intervention points of the Affirmative Action programme. This explains why 19.5 per cent of the beneficiaries of

2015/2016 were from Saint Mary's secondary school Kitende, 6.2 per cent from Uganda Marty's secondary school Namungongo, 5.8 per cent from Mount Saint Mary's Namagunga, 5.5 per cent from Gayaza High School, 5.5 per cent from Nabisunsa girls' school, 5.2 per cent from King's college, Budo, 2.9 per cent from Immaculate Heart girls school, 2.9 per cent from Naalya sec. school, Kampala, 2.6 per cent from Seeta high school, Mukono, 1.9 per cent from Buddo sec. school, 1.6 per cent from Ndejje secondary school, 1.3 per cent from Bweranyangi girls' school, 1.3 per cent from Kawempe Muslim secondary school, 1.3 per cent from Lubiri secondary school, 1.3 per cent from Mpanga secondary school, 1.3 per cent from Seeta high school, 1.3 per cent from St. Mary's ss Kitende (annex), 1.0 per cent each from Citizen's secondary school, Gombe secondary school, Iganga secondary school, Kigezi high school, Kisozi high school, Makerere college school and Masaka secondary school.

Although the benefit of the programme was concentrated at the high end of the secondary school system, the 1.5 bonus intervention points led to an increase in the secondary school base of the student population in public university education in Uganda. Without the bonus intervention programme, 11 of the top 100 secondary schools would not have had a single woman admitted on a government-sponsored programme of their choice in 2015. The increase in the secondary school base was however limited to the top 100 secondary schools in the country. The 1.5 bonus intervention points worked best in the top high schools. It made the biggest difference in the central region of Uganda, exacerbating the regional and district gender disparities in public university education, due to the tendency of the programme to benefit women who are better off among the target group, often to the disadvantage of those from the least fortunate districts and high schools.

As confirmed, the Affirmative Action programme benefitted students depending on the epistemic advantage or privilege (Mamo, 2005; Intemann, 2010) rendered to students in the context of specific high schools. As results showed, the counterfactual effect of the high school factor on the effectiveness of the Affirmative Action policy and programme was profound. This is in the context of the national merit system, in which the implementation of the 1.5 bonus points of the Affirmative Action programme was carried out. The strong counterfactual effect of the high school factor on equity and equality confirms the significance of the feminist Standpoint

empiricist theory in the understanding of the policy efficacy of Affirmative Action (Intemann, 2010). This explains why 19.5 per cent of the beneficiaries of 2015/2016 were a single high school and the conclusion that the high school factor was the prequalification for individual merit and subsequently that of being a beneficiary of the 1.5 bonus intervention points of the Affirmative Action programme. Moreover, the notion of epistemic advantage or privilege that turned out true, offers new and fresh perspectives for the future design, development and implementation of policies such as Affirmative Action.

#### **8.4 The benefits of Affirmative Action by career fields**

Results show that more fields of study were open for women because of the bonus intervention points of the Affirmative Action policy. The counterfactual effect of the 1.5 bonus intervention points for female students of 2015/2016 class was visible. However, it was not the case in the fields of study significant for the women's empowerment agenda in the country. Table 8.5 below provides a summary of the proportions of beneficiaries from the top 12 beneficiary fields of study from the class of the 2015/2016 academic year:

**Table 8.5: Percentage contribution of the bonus intervention programme to female uptake by field of study for 2015/2016 academic year**

<b>FIELD OF STUDY</b>	<b>NUMBER OF BENEFICIARIES</b>	<b>PER CENT</b>	<b>PER CENT OF TOTAL</b>
Bachelor of Arts in Development Economics (DEC)	16	100.0	5.2
Bachelor of Arts with Education (EDA)	16	88.9	5.2
Bachelor of Medicine and Bachelor of Surgery (MAM)	15	60.0	4.8
Bachelor of Science (Biological) (SCB)	15	100.0	4.8
Bachelor of Social Work and Social Administration (SOC)	11	68.8	3.5
Bachelor of Statistics (STA)	10	58.8	3.2
Bachelor of Arts in Drama and Film (BDF)	10	100.0	3.2
Bachelor of Business Administration (ADM)	10	66.7	3.2
Bachelor of Pharmacy (PHA)	9	90.0	2.9
Bachelor of Science with Education (Economics) (EEC)	9	69.2	2.9
Bachelor of Science in Quantity Surveying (SQS)	9	90.0	2.9

Of the 158 fields of study analysed, there were only two where no single woman benefitted from the bonus intervention programme in 2015/2016. These were Bachelor of Science in Biotechnology (BBT) and Bachelor of Science in Petroleum Geosciences and production (BPG).

Due to Affirmative Action protection, public university fields of study became more open for more women. Fifteen women (representing 60 per cent) admitted to Bachelor of Medicine and Bachelor of Surgery in 2015 would not have made it to the programme without the 1.5 bonus intervention points of the Affirmative Action. Had it not been for the benefit of the Affirmative Action programme, no single woman would have been admitted under government sponsorship in 16 fields of study during the 2015/16 academic year. These 16 fields included Bachelor of Arts in Development Economics (DEC), Bachelor of Science (Biological) (SCB), Bachelor of Arts in Drama and Film (BDF), Bachelor of Science in Population Studies (BPS), Bachelor of Environmental Health Science (BEH), Bachelor of Science (Economics) (SEC), Bachelor of Science in Nursing (NUR), Bachelor of Biomedical laboratory technology (MLT), Bachelor of science in Biomedical Engineering (BBI), Bachelor of Science in Software Engineering (BSW), Bachelor of Science in Agricultural Engineering (AGE), Bachelor of Dental Surgery (BDS), Bachelor of Science in Conservation Biology (BCB), Bachelor of Agriculture and Rural Innovation (BAR), Bachelor of Animal Production Land use and management (BAP) and Bachelor of Cytotechnology (BYT). Sixty per cent of women admitted to Bachelor of Medicine and Bachelor of Surgery in 2015 would not have made it without the 1.5 bonus intervention points of the Affirmative Action. This shows that, due to Affirmative Action protection, a number of fields of study became more available for more women than was previously the case.

The percentage of women who could not have made it to the academic programmes was clearly visible in all fields of study. However, the scope of the counterfactual effect of the Affirmative Action programme on women's representation varied from one field of study to another. It ranged from 15.4 per cent in Bachelor of Record and Archive management (BRA), to 25 per cent in Bachelor of Library and Information Science (LIS). It was 28.6 per cent in Bachelor of Conservation Forestry and Product Engineering (CFP) and 30.8 per cent in Bachelor of Laws (LAW). In Bachelor of Arts in Economics (ECO), Bachelor of Science in Horticulture (HOT), Bachelor of Science in Business Statistics (BBS), Bachelor of Science in Computer Engineering (CMP) and Bachelor of Science in Construction Management (SCM) the percentage was 33.3. It was 42.9 per cent in Bachelor of Science in medical radiology (BMR) and 44.4 per cent in Bachelor of Science with Education (Biological) (EDB). Fifty per cent in Bachelor of Information Technology (BIT), Bachelor of Science (Physical) (SCP), Bachelor of Science in

Land Economics (SLE), Bachelor of Architecture (ARC), Bachelor of Industrial Fine Art (FIN), Bachelor of Science in Actuarial Science (SAS) and Bachelor of Science in Computer Science (CSC), 57.1 per cent in Bachelor of Science in Mechanical Engineering (MEC) would not have made it without the bonus points of the Affirmative Action programme. The percentage of beneficiaries went up to 58.3 in Bachelor of Science in Industrial Chemistry (BIC), 60 per cent in Bachelor of Science in Agribusiness management (AGM) and 62.5 per cent in Bachelor of Statistics (STA). It was 66.7 per cent in Bachelor of Medicine and Bachelor of Surgery (MAM), Bachelor of Science in Quantitative economics (BQE), Bachelor of Business Administration (ADM), Bachelor of Science in Human Nutrition (HUN) and Bachelor of Social and Entrepreneurial Forestry (SEF). It rose to 68.8 per cent in Bachelor of Environmental Science (BVS), 69.2 per cent in Bachelor of Science in Telecommunication Engineering (STE), 70 per cent in Bachelor of Social Work and Social Administration (SOC) and 71.4 per cent in Bachelor of Science with Education (Economics) (EEC) and Bachelor of Science in Agriculture (AGR). Still higher, it was 75 per cent in Bachelor of Science in Electrical Engineering (ELE), 80 per cent in Bachelor of Science in Biomedical Sciences (BSB) and 83.3 per cent in Bachelor of Science in Meteorology (BMT), Bachelor of Industrial and Organizational Psychology (BIP) and Bachelor of Commerce (COE). Among the highest was 85.7 per cent in Bachelor of Community Psychology (BCO), 88.9 per cent in Bachelor of Veterinary Medicine (VET) and 90 per cent in Bachelor of Pharmacy (PHA) and Bachelor of Science in Quantity Surveying (SQS), respectively. Table 8.6 below presents a list of fields of study with the highest percentage of the beneficiaries of the 1.5 bonus intervention programme for 2105/2016 academic year:

**Table 8.6: Fields of study with the highest percentage of the beneficiaries of the 1.5 bonus intervention programme for 2015/2016**

<b>FIELD OF STUDY</b>	<b>NUMBER OF BENEFICIARIES</b>	<b>PER CENT</b>	<b>PER CENT OF TOTAL</b>
Bachelor of Arts in Development Economics (DEC)	16	100.0	5.2
Bachelor of Arts with Education (EDA)	16	88.9	5.2
Bachelor of Medicine and Bachelor of Surgery (MAM)	15	60.0	4.8
Bachelor of Science (Biological) (SCB)	15	100.0	4.8
Bachelor of Social Work and Social Administration (SOC)	11	68.8	3.5

Bachelor of Statistics (STA)	10	58.8	3.2
Bachelor of Arts in Drama and Film (BDF)	10	100.0	3.2
Bachelor of Business Administration (ADM)	10	66.7	3.2
Bachelor of Pharmacy (PHA)	9	90.0	2.9
Bachelor of Science with Education (Economics) (EEC)	9	69.2	2.9
Bachelor of Science in Quantity Surveying (SQS)	9	90.0	2.9
Bachelor of Science in Human Nutrition (HUN)	8	66.7	2.6
Bachelor of Science in Population Studies (BPS)	8	100.0	2.6
Bachelor of Environmental Health Science (BEH)	7	100.0	2.3
Bachelor of Science (Economics) (SEC)	7	100.0	2.3
Bachelor of Science in Agribusiness management (AGM)	7	58.3	2.3
Bachelor of Science in Agriculture (AGR)	7	70.0	2.3
Bachelor of Arts in Music (MUS)	6	85.7	1.9

## 8.5 Discussion

The Affirmative Action programme led to an increase in the gender base of the student population in public university education in Uganda and, by implication, to the notion of gender equality as a governance concept in which public universities sought to promote a more inclusive campus. By expanding the gender base, it enabled public universities to take an important initial step to create a culture that values gender differences in national development.

The narrow district and secondary school base of the distribution of the beneficiaries of the programme indicates that the programme did not have a significant impact on expanding the district, high school and college base in the student population; most especially at the echelons of most selective departments in public university colleges and in the majority of districts of the country. The programme worked best in only two colleges. These were the colleges of Social Sciences and Humanities and that of Business management; and in 20 (14 per cent) out of 158 academic programmes, where it made a modest difference in the gender equality discourse, but more so for women who qualified from schools and districts that were relatively well off. The 1.5 bonus intervention programme benefitted the cause for gender equality largely in the central region of Uganda. This was the case given that no special preference was given for women from less competitive districts and high schools, which actually represent the majority of the female

population of Uganda for whom the programme is most needed.

The reason for the dismal gender performance was due to the fact that gender was not fully integrated in Uganda's national merit and district quota systems of distribution, albeit the introduction of Affirmative Action. In fact, under the Affirmative Action, gender was treated as a bonus and complementary facet to the national merit and district quota systems. As was defined under the 1.5 bonus intervention scheme, implementers were only required to treat gender as a bonus. While the district quota had a 25 per cent and the national merit a 75 per cent intake requirement, gender had none. It was fully integrated neither in the national merit nor in the district quota systems. This bonusification of gender is problematic. Little progress will be made unless gender becomes an integral part of the national merit and the district population quota systems of admission. This would require programmes slotted on national merit and district quotas system to all meet specific designated gender-based quotas.

The policy discrepancy stated above explains the narrow geographic and demographic base of gender in the public university student population. It explains why the gender base is narrower than expected, following more than a quarter of a century's worth of experience in the implementation of the 1.5 bonus scheme. Because of the bonusification of gender, both women and men from underprivileged schools and remote districts faced severe disadvantages, marginalisation and exclusion, particularly in the most selective departments of public university colleges. The narrow geographic and demographic gender base in the representation of women in colleges is a major structural conundrum for development. This has made the binary division between men and women in the critical fields in public university colleges a complex issue. Therefore, the policy has tended to marginalise women as do the majority of districts in the country that they represent.

There was severe under representation of women in eight out of ten colleges. The bonusification of gender and the widening gender parity gap across colleges marginalises and excludes women and men from the key sectors of the economy, particularly in the most selective departments of public universities. This underscores the importance of gender-based equity policies that address the geography and demography of women and men in all career fields critical to economic growth and development of Uganda. The central region of Uganda achieved gender parity

overall, owing to 1.5 bonus intervention points of the Affirmative Action programme for women. This was not because the policy was effective in the region, but because the central region produced the majority of women who fell short of the national merit, but did well enough to be bonusified. For that reason, the bonus approach was found to be more effective in the central region compared to other regions in the country, where the majority of the women fell short of the bonus line. This is why the 1.5 bonus intervention points of the Affirmative Action programme did not benefit women students from less competitive high schools and districts outside Central and Western Uganda, but instead led to a marginalising effect on women in the poorer regions and districts of the country.

Although supporters of the Affirmative Action programme interviewed argued in support of the evidence that Affirmative Action helped more women in higher education, these were not necessarily historically excluded women. The fact that the majority (86.4 per cent) of the beneficiaries were from 41 top secondary schools in the country is evidence for this conclusion. In the class of the 2015/2016 academic year, two out of every 10 beneficiaries of the programme came from one secondary school – Saint Mary’s Secondary School Kitende. Out of every 10 beneficiaries of the programme, four were from the two districts of Wakiso and Kampala. The top four districts of the Affirmative Action programme of Wakiso, Kampala, Kabale and Pallisa controlled 41 per cent of the benefits of the programme.

Access to a public university opportunity for the beneficiaries of the Affirmative Action programme was not a factor of the 1.5 bonus points alone, but that of the high schools. With three out of every ten beneficiaries originating from the two top high schools in the country, the idea that the bonus policy would open space for women and make public institutions, especially universities, more representative of the population is yet far from reality. 86 per cent of the beneficiaries of the programme were from 41 out of 112 districts. If the purpose of the policy was to open space for the victims of historical injustices, then the 1.5 bonus intervention programme failed, more so in the public university career fields critical to economic growth and development of Uganda.

More than at any time in its history, the country needs to make further efforts at inclusion. To address structural disadvantages associated with geographic and demographic inequalities in

education, including in tertiary institutions, it was recommended that the Affirmative Action policy framework should go beyond gender, to ensure that the system is representative of the population dynamics and diversity of the country. When probed to substantiate;

*The Affirmative Action programme needs to be reviewed and redesigned to take current circumstances into account. The aim should be to promote equity and equality of participation in all districts and within all colleges and fields of study critical to economic growth and development (Andre, from interviews). This would require a new quota-based mandate. Most importantly, we need new mandates, to grant special consideration for the hard to reach, the most isolated and the most marginalised districts in public university education and in the distribution of quality education in the country as a whole (Sana, from interviews).*

The above implies that the Affirmative Action programme should emphasise specific quotas or targeted goals to increase the representation of women and men in university programmes. This case was made all fields of study where women are most excluded, including medical, natural sciences, engineering, and in the most selective departments where equity and equality agenda continue to be undermined. It was the views of respondents that fields of study that continue to undermine the role of women must be compelled to address themselves fully to areas or districts of the country that have been disenfranchised by the distribution policies, systems and practices. Doing so would advance a more inclusive, equitable and sustainable human development approach, which benefits all districts, without favoring one or discriminating against another. The country would ensure that Affirmative Action indeed benefits the historically marginalised, not just those in privileged positions as manifested in the fact that the benefit of the 1.5 bonus intervention programme tended to benefit the relatively well off.

Affirmative Action in education exists in many countries. In the US, there is a history and the tradition in which race and other forms of social preferences are taken into account in admission policies and systems for universities and other forms of higher education (Anderson et al., 2008; Fleming & Pollak, 1970). Race, ethnicity, social class, origin and gender are some of the factors that may be taken into account in the eligibility criteria. Academic scholarships can be awarded based on these criteria to ensure universities and higher institutions of learning pursue scholarly

excellence while serving their role as providers of civic good. In China, Affirmative Action has taken the form of either quotas that are set by universities to promote minority student intake or lowering minimum requirements for their entry. Scholarships, stipends or tuition are also provided for minority students who enroll in ethnic minority oriented specialties (Niu & Wan, 2018). In Israel, Affirmative Action policy exists in the four most selective universities in the country. Structural disadvantages, such as students' socioeconomic status and high school, are taken into account (Alon, 2011). In Finland, quota systems exist for certain university education programmes. The objective of the Finnish system is to guarantee training and education of sufficient number of professionals nationwide. In France, students from schools in poor neighborhoods benefit from special policies in certain institutions.

## **8.6 Conclusion and recommendations**

Uganda's Affirmative Action policy improved women's access to public university educational opportunities in districts of Uganda and in public university fields of study critical to economic growth and development. However, it did not necessarily serve the needs of the historically excluded women. The majority (86.4 per cent) of the beneficiaries were from 41 top secondary schools in the country. In the class of the 2015/2016 academic year, two out of every 10 beneficiaries of the programme came from one secondary school, three out of every 10 from two top high schools. Out of every 10 beneficiaries of the programme, four were from the two districts of Wakiso and Kampala. Forty per cent of beneficiaries were from the central region, 26 per cent from the west, 25.6 the east and 8.4 per cent from the north, respectively. The district and high school base of the distribution system of the affirmative programme for public university education was narrow, with 40 per cent of beneficiaries from the central region, 26 per cent from the west, 25.6 the east and 8.4 per cent from the north respectively.

Although the counterfactual effect of the 1.5 bonus intervention points of the Affirmative Action programme is visible, the programme benefitted a specific category of women from specific districts of the country and from a few top secondary schools. The benefit of the programme did not reach the underserved categories of women for whom it was most needed. In spite of its sympathy for gender equality as a common cause, the policy did not anticipate how the benefits

of the 1.5 bonus intervention points would go to those who did not need it.

Rooted in Article 32 of Uganda's Constitution, the affirmative Action policy was intended to increase the participation of women in public university education. In particular, Affirmative Action would redress structural disadvantages of the past and present. It would ensure public institutions are more representative of the populations. It would serve to ensure all those disadvantaged for social, cultural and historical reasons received their entitlement in tandem with the equity and empowerment agenda of the 1990s. By Affirmative Action, the state of Uganda committed to undertake a series of measures to end all forms of discrimination against women. This included the incorporation of the principle of equality of men and women in the legal system, the establishment of tribunals, such as the Equal Opportunities Commission (EOC), to ensure the effective protection of children and women against discrimination. The country reserved a Parliamentary seat for a woman in each district to redress the imbalances created by history, tradition or custom. Under the Ugandan constitution, it is the obligation of the state to promote equal educational opportunities for all, without discrimination (The Equal Opportunities Commission Act, 2007).

Because these historical inequalities still exist, a country of Affirmative Action would be much fairer than one in which these circumstances are ignored. The notion that the use of a population based quota policy in all fields of study would cause unprepared applicants to be accepted in highly demanding fields of study and encourage mediocrity and incompetence is counterproductive. This is given the fact that the same top secondary schools and public university colleges admit privately sponsored students with lower academic grades.

Suggestions from interviews and focus group discussions indicate that it is time to question the absence of the quota-based system in key fields of study and in the secondary school admission system. The idea of quota-based systems is to provide the incentive to eliminate gender and geographic bias at all levels of education. I strongly recommend that the bonus intervention policy should not only be offered to applicants from the top secondary schools that are often best placed to meet the benefit threshold. The most qualified applicants – men and women from every district across the country – should also be targeted, particularly in the fields of sciences. This should not be viewed as a recommendation for lowering the bar and denying those who strive for

excellence a sense of real achievement. Instead, the concept of national merit should be seen and defined within its context when assessing the eligibility of students in both secondary schools and colleges of public universities.

This would require a reform of the traditional national merit system. In which case, limiting the national merit system to 25 per cent would be a palpable option, with the primary aim of empowering the current system to attract and reward top-level talents as well as encourage innovation. It would then imply that 75 per cent of all publically sponsored opportunities could be selected through a reformed National Merit System. The basis of this would be the district population quota, with at least 50 per cent female designation for all career fields critical to economic growth and development of Uganda. Talented students who may be disadvantaged due to limited capacity would be expected to benefit from the national student loans scheme, so that they can pursue the career of their qualification. To strengthen gender integration, policy coherence and independence, the 1.5 bonus intervention policy of the Affirmative Action programme would be targeted at both women and men in all districts that do not realise their quota in all fields of study critical to economic growth and development.

The next chapter examines the question of the representation of women and men in career fields of study in public university education in Uganda. The chapter investigates the meaning, function and implications of equity and gender equality in the public university education in regions and districts of Uganda. It examines if and how policies, systems and practices of distribution put men and women in different social positions, and how this may explain the empowerment of some and disempowerment of others.

# **CHAPTER NINE**

## **GENDER IN UGANDA’S PUBLIC UNIVERSITY EDUCATIONAL DISTRIBUTION**

How are men and women represented by career fields in public university education in Uganda?

### **9.1 Introduction**

Chapter Nine examines the question of the representation of women and men in public university education in Uganda. It assesses how men and women are represented in career fields critical to economic growth and development in Uganda and the meaning, function and implications of this representation for equity and gender equality in the public university education in regions and districts of Uganda. The chapter focuses on gender as a socially, culturally and historically specific concept in the context of public university education in Uganda. It analyses the gendered subjects (men and women) in public university education in Uganda and their position in the admission policies, systems and practices of governance. It examines if and how policies, systems and practices of distribution put men and women in different social positions, and how this determines the empowerment of some and the disempowerment of others. The chapter identifies districts and fields of study where the gendered gap is prominent, in the context of Uganda’s public university educational distribution system.

### **Empirical findings**

### **9.2 Gender Parity by regions and districts of Uganda**

By region, Central Uganda achieved parity overall, with an average gender parity index (GPI) of 1.0. Table 9.1 below provides a general summary of the status of Gender Parity for the four regions of Uganda, based on the public university student population from 112 districts, compiled from the records of 2009 to 2017 (MUK, 2009, 2010, 2012, 2013, 2014, 2015, 2016 and 2017):

**Table 9.1: Summary of gender parity index in public university student population in four regions of Uganda**

REGION	NUMBER OF DISTRICTS WITH PARITY INDEX OF 0.9 AND ABOVE	NUMBER OF DISTRICTS WITH PARITY INDEX BELOW 0.9	NUMBER OF DISTRICTS WHERE WOMEN HAD A SLIGHT EDGE OVER MEN	TOTAL
WESTERN	6	16	4	26
CENTRAL	4	12	7	24
EASTERN	8	22	3	33
NORTHERN	3	24	2	29
<b>TOTAL</b>	<b>21</b>	<b>74</b>	<b>16</b>	<b>112</b>

Table 9.2 below provides a summary of 13 districts of Uganda where GPI in the distribution of public university educational opportunities were at par:

**Table 9.2: Summary of 13 districts in Uganda where GPI were at par**

DISTRICT	MALE	FEMALE	TOTAL	MALE %	FEMALE %	GPI
LUWEERO	2052	2154	4206	2	2.1	1.0
WAKISO	10010	10453	20463	9.8	10.2	1.0
KISORO	97	101	198	0.2	0.2	1.0
KAYUNGA	592	612	1204	0.6	0.6	1.0
LAMWO	2	2	4	0	0	1.0
KATAKWI	2	2	4	0	0	1.0
KABAROLE	291	291	582	0.6	0.6	1.0
AMURIA	9	9	18	0	0	1.0
AGAGO	1	1	2	0	0	1.0
KAMPALA	15540	15344	30884	15.2	15	1.0
MUKONO	4166	4095	8261	4.1	4	1.0
MANAFWA	31	30	61	0.1	0.1	1.0
SIRONKO	25	24	49	0	0	1.0

Only 13 districts out of 112 had GPI at par. All five districts with the highest number in student population in Central Uganda achieved parity. Severe levels of under representation of women were observed in all regions of the country. Women were under represented in 74 (63%) out of 112 districts. Gender Parity was in favour of women in 24 districts. This represents 21 per cent of the 112 districts. Table 9.3 below provides a summary of 24 districts where the GPI was in favour of women:

**Table 9.3: Summary of 25 districts where GPI was in favor of women**

DISTRICT	MALE	FEMALE	TOTAL	MALE %	FEMALE %	GPI
KOLE	11	71	82	0	0.1	6.5
ISINGIRO	15	70	85	0	0.1	4.7
BUDAKA	15	55	70	0	0.1	3.7
BUNDIBUGYO	15	47	62	0	0.1	3.1
SERERE	1	3	4	0	0	3.0
RUKUNGIRI	372	944	1316	0.4	0.9	2.5
KAKUMIRO	5	10	15	0	0	2.0
GOMBA	7	14	21	0	0	2.0
KUMI	8	14	22	0	0	1.8
AMURU	5	8	13	0	0	1.6
IBANDA	253	386	639	0.2	0.4	1.5
RUBIRIZI	2	3	5	0	0	1.5
PADER	2	3	5	0	0	1.5
KYELEGWA	4	6	10	0	0	1.5
BUSHENYI	1581	2229	3810	1.5	2.2	1.4
ABIM	5	7	12	0	0	1.4
ALEBTONG	3	4	7	0	0	1.3
BUTAMBALA	75	97	172	0.1	0.2	1.3
SEMBABULE	8	10	18	0	0	1.3
KALIRO	83	101	184	0.2	0.2	1.2
KASESE	154	182	336	0.3	0.4	1.2
KALANGALA	36	41	77	0.1	0.1	1.1
MPIGI	1605	1778	3383	1.6	1.7	1.1
MOYO	12	13	25	0	0	1.1

The relative position of women in public university education was marginal in most districts, in spite of a growing public university education sub-sector since 1991. The majority of districts that lagged behind in women's representation in public university education were from remote rural and disadvantaged areas of the country. As Table 9.4 below shows, the majority of districts that lagged behind were those most excluded by the geography of their location and therefore isolated from all aspects of quality public life – including quality schools.

**Table 9.4: List of 74 districts in Uganda that lagged behind in gender parity**

DISTRICT	MALE	FEMAL E	TOTAL	MALE %	FEMALE %	GPI
KALUNGU	121	113	234	0.2	0.2	0.9
KITGUM	33	30	63	0.1	0.1	0.9
IGANGA	492	441	933	0.5	0.4	0.9
BUIKWE	1121	1001	2122	1.1	1	0.9
MITYANA	908	798	1706	0.9	0.8	0.9
BUSIA	140	123	263	0.3	0.2	0.9
TORORO	508	445	953	0.5	0.4	0.9
KWEEN	8	7	15	0	0	0.9
KAGADI	16	14	30	0	0	0.9
KAPCHORWA	52	45	97	0.1	0.1	0.9
RAKAI	221	190	411	0.4	0.4	0.9
MUBENDE	131	111	242	0.3	0.2	0.8
BUKWO	38	32	70	0.1	0.1	0.8
LWENGO	30	25	55	0.1	0.1	0.8
KAABONG	12	10	22	0	0	0.8
ADJUMANI	11	9	20	0	0	0.8
NAKASONGOLA	84	68	152	0.2	0.1	0.8
KIBOGA	81	65	146	0.2	0.1	0.8
BUTALEJA	45	36	81	0.1	0.1	0.8
KANUNGU	143	114	257	0.3	0.2	0.8
KIRUHURA	64	51	115	0.1	0.1	0.8
DIPLOMA	452	360	812	0.4	0.4	0.8
MAYUGE	83	65	148	0.2	0.1	0.8
NGORA	122	95	217	0.2	0.2	0.8
ARUA	197	149	346	0.4	0.3	0.8
ZOMBO	4	3	7	0	0	0.8
MASAKA	1309	980	2289	1.3	1	0.7
OTUKE	18	13	31	0	0	0.7
HOIMA	607	432	1039	0.6	0.4	0.7
NAKASEKE	187	132	319	0.4	0.3	0.7
PALLISA	101	71	172	0.2	0.1	0.7
MBALE	535	376	911	0.5	0.4	0.7
NAMUTUMBA	67	47	114	0.1	0.1	0.7
KIBAALE	119	80	199	0.2	0.2	0.7

GULU	114	76	190	0.2	0.2	0.7
BUDUDA	9	6	15	0	0	0.7
KABALE	960	632	1592	0.9	0.6	0.7
JINJA	1796	1129	2925	1.8	1.1	0.6
NWOYA	44	27	71	0.1	0.1	0.6
KIRYANDONGO	76	46	122	0.1	0.1	0.6
LIRA	196	118	314	0.4	0.2	0.6
MBARARA	1677	997	2674	1.6	1	0.6
SHEEMA	186	108	294	0.4	0.2	0.6
NEBBI	33	19	52	0.1	0	0.6
KAMULI	183	101	284	0.4	0.2	0.6
APAC	40	22	62	0.1	0	0.6
BUGIRI	35	19	54	0.1	0	0.5
KAMWENGE	218	113	331	0.4	0.2	0.5
MASINDI	191	97	288	0.4	0.2	0.5
LUUKA	6	3	9	0	0	0.5
KYEJOJO	36	18	54	0.1	0	0.5
KOTIDO	16	8	24	0	0	0.5
BUYENDE	2	1	3	0	0	0.5
BUKOMANSIMBI	18	9	27	0	0	0.5
AMUDAT	2	1	3	0	0	0.5
MITOOMA	77	38	115	0.1	0.1	0.5
NTUNGAMO	749	360	1109	0.7	0.4	0.5
LYANTONDE	59	27	86	0.1	0.1	0.5
MARACHA	20	9	29	0	0	0.5
MOROTO	44	19	63	0.1	0	0.4
AMOLATAR	7	3	10	0	0	0.4
DOKOLO	5	2	7	0	0	0.4
KIBUKU	13	5	18	0	0	0.4
PAIDAH	8	3	11	0	0	0.4
SOROTI	369	128	497	0.7	0.3	0.3
KABERAMAIDO	11	3	14	0	0	0.3
KOBOKO	25	5	30	0	0	0.2
BUKEDEA	20	4	24	0	0	0.2
BULIISA	6	1	7	0	0	0.2
YUMBE	11	1	12	0	0	0.1
PAKWACH	2	0	2	0	0	0.0

KYANKWANZI	1	0	1	0	0	0.0
BULAMBULI	2	0	2	0	0	0.0
BUHWEJU	6	0	6	0	0	0.0

Table 9.5 below provides a summary of gender parity index calculated for regions of Uganda based on the number of public university student population collated from the top five districts from each region:

**Table 9.5: Summary of gender parity index for regions of Uganda based on number of public university students from top five districts in each region**

REGION	MALE	FEMALE	TOTAL	% Male	% Female	Parity
CENTRAL	33 373.0	33 824.0	67 197.0	49.7	50.3	1.01
NORTH	562.0	441.0	1 003.0	56.0	44.0	0.78
EAST	4 452.0	3 392.0	7 844.0	56.8	43.2	0.76
WEST	5 339.0	5 162.0	10 501.0	50.8	49.2	0.97

The central region of Uganda achieved gender parity overall, due in large part to the success of the implementation of the 1.5 bonus intervention points of the Affirmative Action programme in the region. The findings show that the programme benefitted more women from the region than it did for women from other less competitive districts, outside Central and Western Uganda. The majority (86.4 per cent) of the beneficiaries of the bonus 1.5 programme were from 41 top secondary schools, mainly located in the central region. Out of every 10 beneficiaries of the programme, four were from the two districts of Wakiso and Kampala. Forty per cent of beneficiaries were from the central region, 26 per cent from the west, 25.6 the east and 8.4 per cent from the north. The implementation of the Affirmative Action was not intended to bring about the structural change in the gendered composition of the student population for districts of Uganda that needed it. Table 9.6 is a summary of gender parity index for each of the top five districts in each region of Uganda:

**Table 9.6: Summary of gender parity index of each of the top five districts in each of the four regions**

DISTRICT	REGION	MALE	FEMALE	TOTAL	% Male	% Female	Parity
KAMPALA	CENTRAL	15540	15344	30884	50.3	49.7	1.0
WAKISO	CENTRAL	10010	10453	20463	48.9	51.1	1.0

MUKONO	CENTRAL	4166	4095	8261	50.4	49.6	1.0
LUWEERO	CENTRAL	2052	2154	4206	48.8	51.2	1.0
MPIGI	CENTRAL	1605	1778	3383	47.4	52.6	1.1
ARUA	NORTH	197	149	346	56.9	43.1	0.8
LIRA	NORTH	196	118	314	62.4	37.6	0.6
GULU	NORTH	114	76	190	60.0	40.0	0.7
KOLE	NORTH	11	71	82	13.4	86.6	6.5
NWOYA	NORTH	44	27	71	62.0	38.0	0.6
JINJA	EAST	1796	1129	2925	61.4	38.6	0.6
BUIKWE	CENTRAL	1121	1001	2122	52.8	47.2	0.9
TORORO	EAST	508	445	953	53.3	46.7	0.9
IGANGA	EAST	492	441	933	52.7	47.3	0.9
MBALE	EAST	535	376	911	58.7	41.3	0.7
BUSHENYI	WEST	1581	2229	3810	41.5	58.5	1.4
MBARARA	WEST	1677	997	2674	62.7	37.3	0.6
KABALE	WEST	960	632	1592	60.3	39.7	0.7
RUKUNGIRI	WEST	372	944	1316	28.3	71.7	2.5
NTUNGAMO	WEST	749	360	1109	67.5	32.5	0.5
<b>Overall</b>		<b>43 726.00</b>	<b>42 819.00</b>	<b>86 545.00</b>	<b>50.5</b>	<b>49.5</b>	<b>1.0</b>

As findings show, the largest gender gap was found in districts with the lowest enrolment in public university education. The extent to which women were disproportionately excluded increased significantly from the urban to the rural districts. This was revealed in the finding, which shows that the gender gap in public university education was most concentrated in 73 districts where women's representation most lagged behind. The worst performing districts included Kalungu, Kitgum, Iganga, Buikwe, Mityana, Busia, Tororo, Kwen, Kagadi, Kapchorwa, Rakai, Mubende, Bukwo, Iwengo, Kaabong, Adjumani, Nakasongola, Kiboga, Butaleja, Kanungu, Kiruhura, Mayuge, Ngora, Arua, Zombo, Masaka, Otuke, Hoima, Nakasongola, Pallisa, Mbale, Namutumba, Kiballe, Gulu, Bududa, Kabale, Jinja, Nwoya, Kiyangdongo, Lira, Mbarara, Sheema, Nebbi, Kamuli, Apac, Bugiri, Kamwenge, Masindi, Luuka, Kyejojo, Kotido, Buyende, Bukomansimbi, Amudat, Mitooma, Ntungamo, Lyantonde, Maracha, Moroto, Amolatar, Dokolo, Kibuka, Paidah, Soroti, Kaberamaido, Koboko, Bukedea, Bulisa and Yumbe.

Twenty-one (21) districts (out of 112) achieved parity, with parity index of at least 0.9 and above. Of these, 38 per cent of districts were in the east, 29 per cent in the west, 19 per cent in

the central and 14 per cent in the north of Uganda. Although there were fewer female public university students than males in three regions of the country, the average overall gender parity index achieved in public universities was strong across the board with a parity index of 0.9 in the eastern and western regions and 0.8 in the north. While males were favoured in three of the four regions, there was no single region in which women were favoured.

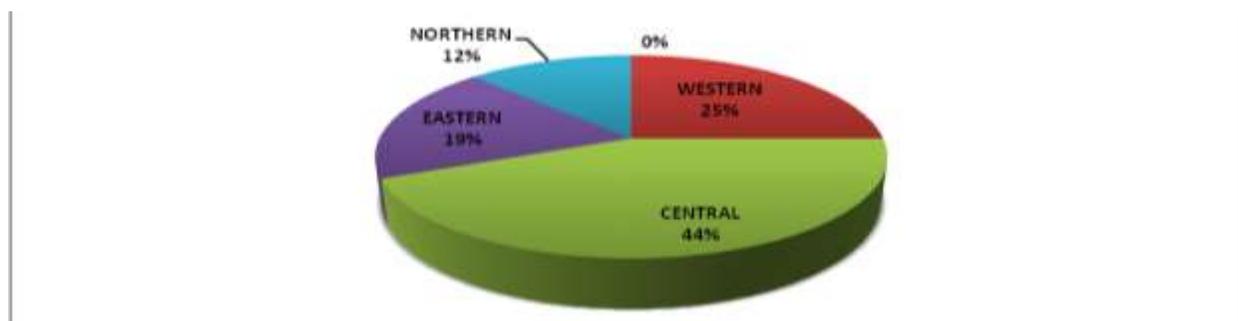
Over two-thirds (67 per cent) of 112 districts failed to close the gender gap in the distribution of public university educational opportunities. Of those that lagged behind, 32 per cent were in Northern Uganda, 30 per cent in the east, 22 per cent in the west and 16 per cent in the central region. There were four districts with a gender parity index of 0.4, seven with 0.5, 18 with 0.6, 22 with 0.7 and 22 with 0.8 (Appendix 7.2). Females had an edge over men in access to public university opportunities in 19 districts. In six (33 per cent) of the 19 districts, the public university student population was significantly lower compared to the rest of the districts in the country. These districts were Buvuma (23 students over eight years), Moroto (81), Otuke (38), Nakapiripirit (66), Kalangala (90) and Kumi (81). Table 9.7 below provides the status of GPI in 19 districts (17 per cent of 112 districts) where women edged men:

**Table 9.7: Districts where women edged men in gender parity index in student population in public universities**

DISTRICT	REGION	MALE	FEMALE	TOTAL	PARITY INDEX
KUMI	EASTERN	287	292	579	1.02
BUHWEJU	WESTERN	40	41	81	1.03
KATAKWI	EASTERN	134	140	274	1.04
KALANGALA	CENTRAL	44	46	90	1.05
MITYANA	CENTRAL	558	585	1143	1.05
MBARARA	WESTERN	1126	1181	2307	1.05
KANUNGU	WESTERN	307	322	629	1.05
MBALE	EASTERN	477	503	980	1.05
MASAKA	CENTRAL	1016	1073	2089	1.06
NAKAPIRIPIRI	EASTERN	32	34	66	1.06
MPIGI	CENTRAL	618	663	1281	1.07
KABAROLE	WESTERN	526	584	1110	1.11
OTUKE	NORTHERN	18	20	38	1.11
BUKEDEA	EASTERN	161	179	340	1.11

KAMPALA	CENTRAL	5006	5599	10605	1.12
WAKISO	CENTRAL	4377	4974	9351	1.14
MOROTO	NORTHERN	34	47	81	1.38
BUVUMA	CENTRAL	9	14	23	1.56
KYENJOJO	WESTERN	150	248	398	1.65

As illustrated in Figure 9.1 below, the proportion of districts where women edged men was highest in the central region, with 44 per cent, compared to 25 per cent in the west, 19 per cent in the east and 12 per cent in the north, respectively.



**Figure 9.1: Proportions of districts where women edged men by region**

Table 9.8 below shows that districts with higher student populations in public universities had smaller gender parity gaps between sexes.

**Table 9.8: Gender parity index in districts with the highest student population**

DISTRICT	REGION	MALE	FEMALE	TOTAL	PARITY INDEX
NTUNGAMO	WESTERN	872	722	1594	0.83
TORORO	EASTERN	686	559	1245	0.81
HOIMA	WESTERN	612	482	1094	0.79
RAKAI	CENTRAL	523	420	943	0.80
KAMULI	EASTERN	522	411	933	0.79
KIRUHURA	WESTERN	521	381	902	0.73
LIRA	NORTHERN	467	409	876	0.88
BUSIA	EASTERN	452	398	850	0.88
KASESE	WESTERN	429	357	786	0.83
ARUA	NORTHERN	417	344	761	0.82
IBANDA	WESTERN	398	337	735	0.85

GULU	NORTHERN	384	342	726	0.89
SOROTI	EASTERN	365	282	647	0.77
MUBENDE	CENTRAL	351	286	637	0.81
PALLISA	EASTERN	338	290	628	0.86
SHEEMA	WESTERN	338	269	607	0.80
ISINGIRO	WESTERN	328	260	588	0.79
KISORO	WESTERN	343	244	587	0.71
BUIKWE	CENTRAL	320	260	580	0.81

The districts that recorded the highest gender parity index in public university education were Kampala, Wakiso, Masaka, Mpigi and Mityana in the central region, Mbarara, Kabarole, Kanungu and Kjenjojo in Western Uganda and Mbale, Kumi, Bukedea and Katakwi in Eastern Uganda. With the exception of the district of Kiruhura, the higher the student population, the smaller was the gender parity gap. Unlike Ntungamo, Tororo and Hoima districts where student population and the district Fair Share Gap were larger, the districts of Lira, Busia, Gulu and Pallisa had the smallest Fair Share Index and smaller gender parity gaps. Districts with higher Equity Gaps, such as Kibale (246), Yumbe (202), Arua (187), Mubende (173) and Kasese (143), had higher gender parity gaps ranging from 0.5 to 0.8. Districts where student population trends were above the average fair share also had higher GPI. Districts that had higher negative average Equity Gaps were also those where men had an edge in GPI over women, even though the differences in GPI were not significant. This was the case for Kampala, Wakiso, Bushenyi, Mbarara, Rukungiri, Mpigi and Jinja.

While gender parity in public university education in Uganda improved overall, progress was concentrated in a few districts of the country. By far, the largest numbers of public university students were concentrated in the central region of Uganda, followed by the west, the east and the northern regions respectively. On average, across 20 leading districts in public university student population (five top districts per region), 49.5 per cent of enrolled students were female and 50.5 percent male. This average implies a relatively sound gender balance at national level. At regional level, district aggregates mask major gender disparities. Women had a slight edge over men in the central region of Uganda. The west enrolled slightly more men than women. The north and the east enrolled larger numbers of males than female students.

From 1991, complementary 1.5 bonus point interventions were adopted in assessing the eligibility of qualified women for public university admission to increase women's access to public university educational opportunities in districts of Uganda and in public university fields of study critical to economic growth and development. Affirmative Action was meant to create opportunities for previously disadvantaged groups of women, to promote diversity, equity and equality in public university education. It was a matter of justice and fairness. Under the 1.5 points programme, gender was only treated as a bonus. There was no specific mandatory requirement or quota to ensure gender was fully integrated in the national merit or district quota systems. Even though there was Affirmative Action, far too fewer women from underprivileged schools in remote districts in Uganda were admitted for public university education from 2009-2018 compared to their counterparts from the elite urban schools and districts of the country. This finding confirms the confounding influence of the district factor and the high schools phenomenon in eliminating the desired effects or potential benefits of the 1.5 bonus intervention programme for women from underprivileged schools in remote districts of the country. This explains why the gendered benefits of higher education were focused on women from the top high schools and districts of the country. After 28 years of Affirmative Action, gender remains the main factor in public university educational inequality in Uganda. The root cause, according to interviewees, is marginalisation – the isolation or exclusion of rural populations, particularly women, from all aspects of quality public life – including quality education, health, politics and the economy. In large part, disparity in access was related to whether or not girls and women come from poor or urban districts, rich or poor backgrounds and whether they live in urban or rural areas, with girls and women who attend schools in rural areas more likely to be excluded. Likewise, poverty was reported to render parents incapable of giving their children the necessary educational support to perform well at school condemning the majority of the population to poor quality education, making social mobility practically impossible and poverty self-perpetuating.

*This undermined the very purpose of the 28 year old Affirmative Action policy to uplift the status of women in higher education; as it implies that our efforts to achieve equity and equality in the distribution of public university educational opportunities was inadequate (Beris, from interviews).*

### 9.3 Gender Parity in public university colleges

To assess how men and women were represented in public university career fields critical to economic growth and development of Uganda, GPI, the quotient of the number of females by the number of males enrolled from 2009 to 2017 in each of the 158 fields of study in 10 public university colleges, was established. Table 9.9 below provides a summary of the distribution of the student population in 10 public university colleges by gender, from 2009 to 2017:

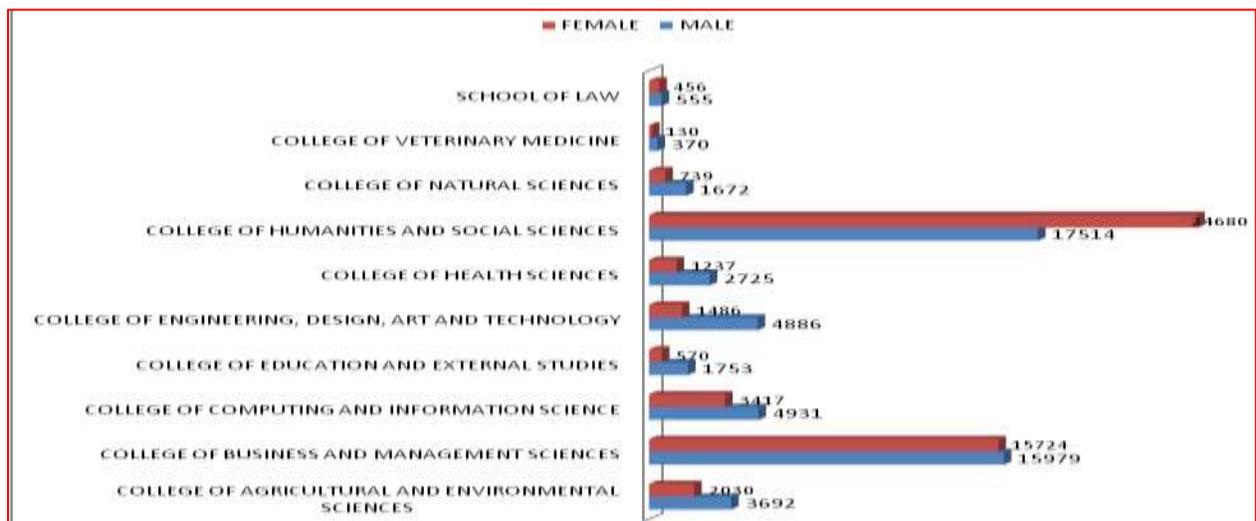
**Table 9.9: Summary of the student population in public university colleges by gender, from 2009 to 2017**

UNIVERSITY COLLEGE	MALE	FEMALE	TOTAL	MALE %	FEMALE %
COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES	3692	2030	5722	6.8	4.0
COLLEGE OF BUSINESS AND MANAGEMENT SCIENCES	15979	15724	31703	29.5	31.2
COLLEGE OF COMPUTING AND INFORMATION SCIENCE	4931	3417	8348	9.1	6.8
COLLEGE OF EDUCATION AND EXTERNAL STUDIES	1753	570	2323	3.2	1.1
COLLEGE OF ENGINEERING, DESIGN, ART AND TECHNOLOGY	4886	1486	6372	9.0	2.9
COLLEGE OF HEALTH SCIENCES	2725	1237	3962	5.0	2.5
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES	17514	24680	42194	32.4	48.9
COLLEGE OF NATURAL SCIENCES	1672	739	2411	3.1	1.5
COLLEGE OF VETERINARY MEDICINE	370	130	500	0.7	0.3
SCHOOL OF LAW	555	456	1011	1.0	0.9

The proportions of the distribution of the student population in the ten colleges ranged from 0.5 per cent in the College of Veterinary Medicine to 1 per cent in the school of Law, 2.2 per cent in the College of Education, 2.3 per cent in the College Of Natural Sciences, 3.8 per cent for the College of Health Sciences, 5.5 per cent in the College of Agriculture, 6.1 per cent in the college of Engineering, 8.0 per cent in the college of Computing and Information Sciences, 30.3 per cent in the College of Business and Management Sciences and 40.4 per cent in the College of Humanities and Social Sciences.

Women lagged behind significantly in all colleges in public universities in Uganda, except two. There were more men than women in all public university colleges, except one – the College of Humanities and Social Sciences. From the total student population of 101 504, the Colleges of

Humanities and Social sciences and Business and Management Sciences accounted for up to 80.1 per cent of the total student population from 2009 to 2017. As Table 9.7 shows, men were favoured in a sizeable majority of eight out of ten colleges while women were favoured in only one. GPI was at par in the college of Business and Management Sciences. The higher the student population in the college, the stronger was the GPI. Among the colleges with the lowest GPI were Engineering, Education (Science), Veterinary Medicine, Natural Sciences and Health Sciences. Figure 9.2 below illustrates the pattern of the distribution of the student population by college and gender, from 2009 to 2017:

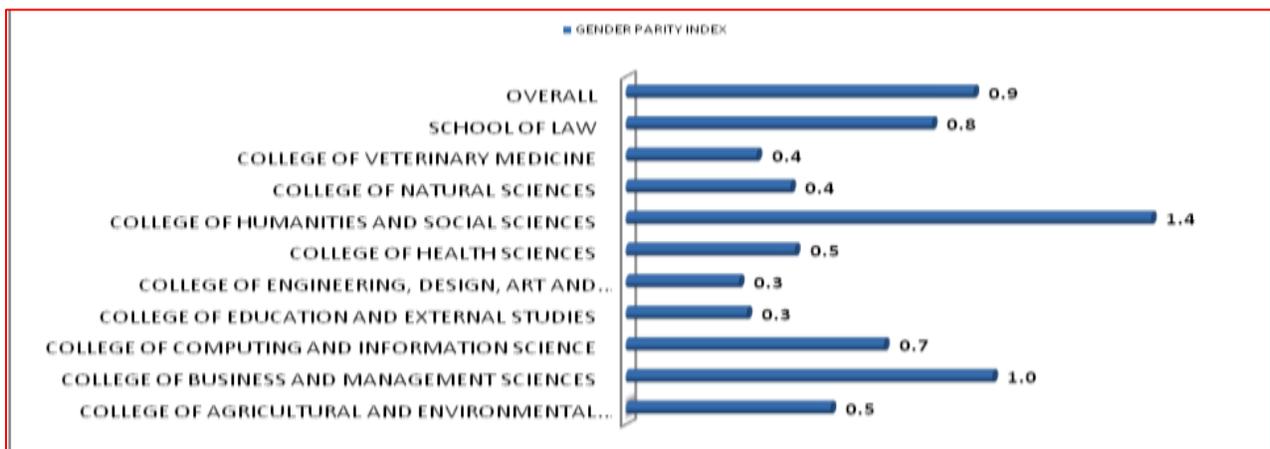


**Figure 9.2: Number of public university student population by college and gender**

Women’s representation was distinctively skewed towards two out of 10 main colleges – the college of Humanities and Social Sciences and the college of Business and Management Sciences. One out of every two female public university students was from the College of Humanities and Social sciences. This distinctive nature of representation was a result of the “*Humanities effect*” – a term coined in this study to explain the effect of the college of Humanities and Social Sciences on gender equality discourse in public universities in Uganda. The phenomenon highlights the excessive discrepancy in GPI observed in this one single college over all others, which often leads to a false perception of the reality of gender parity in public university education in Uganda.

Of the total public university student population from 2009 to 2017, 48.9 per cent was in one

college – the College of Humanities and Social Sciences, where the GPI was significantly tilted in favour of women. Thirty-one point two (31.2) percent of the entire student population over this period was in the College of Business and Management Sciences. Altogether, the two colleges were responsible for 80.1 per cent of the total student population. The rest of the 20 per cent of the total student population was spread across eight colleges where GPI strongly favoured men. In the College of Business and Management Sciences, parity was at par (1.0) between men and women. Figure 9.3 below shows that it was only in the college of Business and Management studies where GPI was at par (parity of 1.0).



**Figure 9.3: Gender Parity Index by public university field of study**

Overall, general trends in GPI were weak in eight out of 10 public university colleges in Uganda and more so in the Colleges of Engineering and Health Sciences. By and large, there was no significant shift observed in Gender Parity in public universities in Uganda, except in the College of Humanities and Social Sciences and less so in colleges where jobs have considerable national appeal. The College of Humanities and Social Sciences was the only public university college where Gender Parity was in favour of women. The overall gender base of the student population in public universities was narrow, owing to the narrow geographic and demographic representation in the public university student population.

Under representation of women was observed in eight out of 10 colleges, mainly attributed to the exclusion of women from the poorest districts and schools in the country, due to the lack of consideration for equity in the national merit, and in the 1.5 bonus intervention policy and system of distribution. Therefore, the implementation of the Affirmative Action measures put in

place since 1991 is yet to affect the status quo – the growing gender inequality challenges in the public university education sub sector, and the widening gender inequality gaps between districts and regions of the country.

While parity was achieved in most fields of study in the Colleges of Business and Management Sciences, Humanities and Social Sciences was the only college where the gender parity index (1.40) was significantly against men, and strongly in favour of women. Besides these two colleges, it was only the School of Law that came close (0.7) to closing the gender gap. The challenge of gender equality in Uganda's public university education is nuanced and complex. Eighty (80) per cent of the total student population of 101 504, from 2009 to 2017 was in two colleges. Nearly 50 per cent of the total number of women in the public university education system was in one out of 10 colleges. While the College of Humanities and Social Sciences represented 48.9 per cent of the total female student population in public universities over this period, the College of Business and Management Sciences accounted for 31.2 per cent of the total female public university student population.

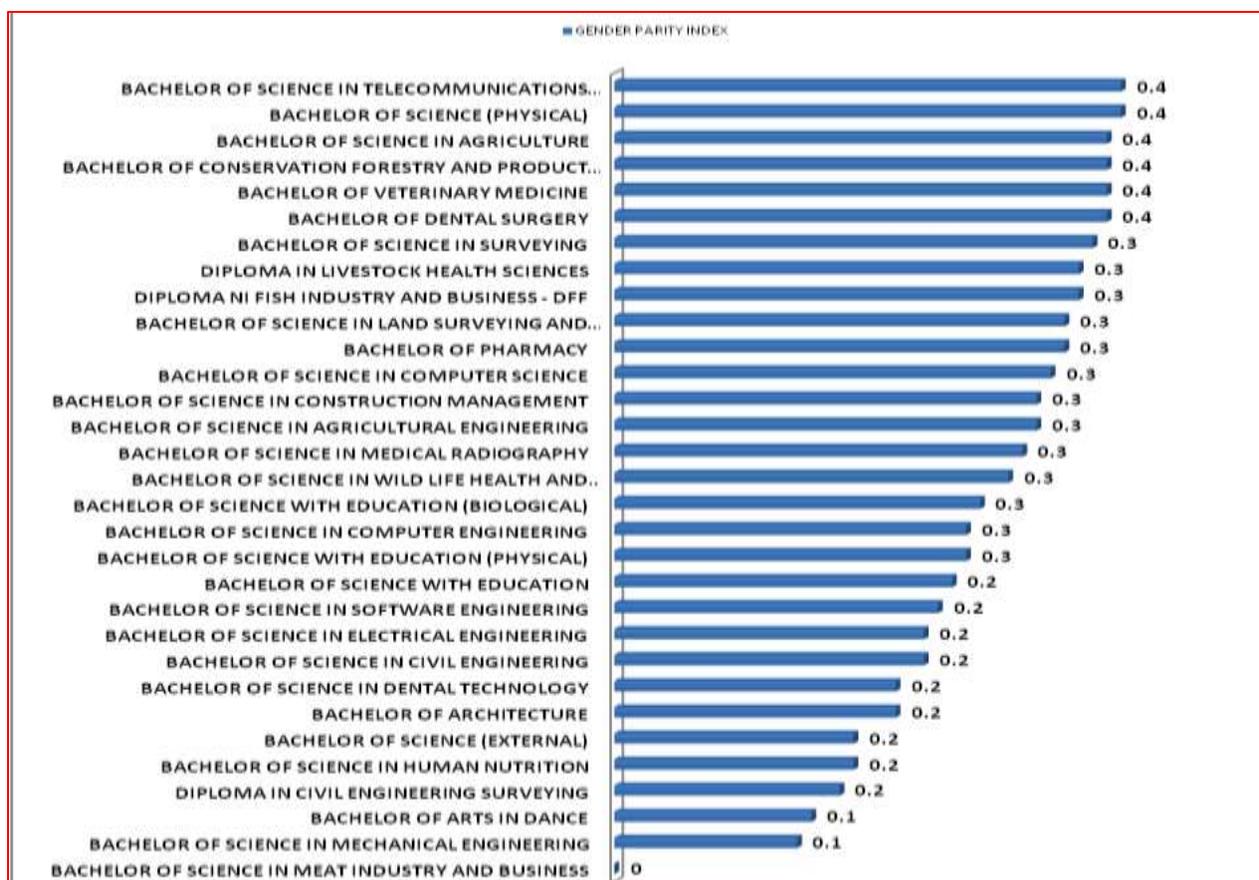
Overall, the average gender parity index over the period 2009 to 2017 was 0.9, owing to the *Humanities Effect* – the very strong gender parity performance against men in the College of Humanities and Social Sciences in which women edged men by 40 per cent. The humanities effect explains the superficially higher and often misleading notion of overall average GPI of 0.9 for the entire public university population. In general, gender parity trends in public universities in Uganda over the eight years was weak across the board – with a parity index of 0.3 in the Colleges of Engineering and Education, 0.4 in the Colleges of Veterinary Medicine and Natural Sciences, 0.5 in the College of Health Sciences, 0.7 in the College of Computing and Information sciences, 0.8 in the School of Law, 1.0 in the College of Business and Management Sciences and 1.4 in the College of Humanities and Social Sciences. This discrepancy presents an important policy conundrum as identified earlier in FGDs and interviews– the need for Uganda to align gender policies in public university colleges from a wider viewpoint of geography (all districts) and in all career fields critical to economic growth and development of the country.

The pattern of gender parity observed in the Colleges of Humanities, Social Sciences and Business and Management Sciences represents an interesting contrast to patterns observed in the

rest of the eight colleges. The general picture there was one of significant inequity at the parity end of 0.3 in the Colleges of Engineering and Education and 1.4 in the College of Humanities and Social Sciences versus severe under representation of women in six colleges and over-representation of women in one out of 10 colleges. Six of the ten colleges were far-removed from gender parity. Only two were within the parity range – the School of Law (0.8) and the College of Computing and Information Sciences (0.7). As GPI trends remain stagnant in six out of 10 colleges, the relative position of women in public universities in Uganda remains problematic, presenting an important development conundrum for the country.

#### **9.4 Gender Parity in public university fields of study**

Gender parity by fields of study was puzzlingly complex. GPI was strongly in favour of men in eight out of 10 colleges. These colleges included Engineering, Education (Science), Veterinary Medicine, Natural Sciences and Health Sciences. There were 31 fields of study with the lowest GPI. Figure 9.4 below shows a summary of a list of 31 academic programmes with the weakest gender parity index over the period 2009 to 2017:



**Figure 9.4: Gender Parity Index in fields of study where women most lagged behind**

In these 31 fields of study, women's representation was at its lowest. All of these fields, except one were from the Colleges of Engineering, Education (Science), Veterinary Medicine, Natural Sciences and Health Sciences. In contrast, the GPI was strongly in favour of women in 37 academic programmes. Thirty (80 per cent) of these were from two colleges, the college of Humanities and Social Sciences, and the College of Business and Management Sciences. Among these 37 fields of study, eighteen registered a GPI of over 1.45. All of them (except one) were from the Colleges of Humanities and Social Sciences and Business and Management Sciences.

Figure 9.5 below shows a list of 18 academic programmes where women had a significant edge over men:



**Figure 9.5: Gender Parity Index in fields of study where women edged men**

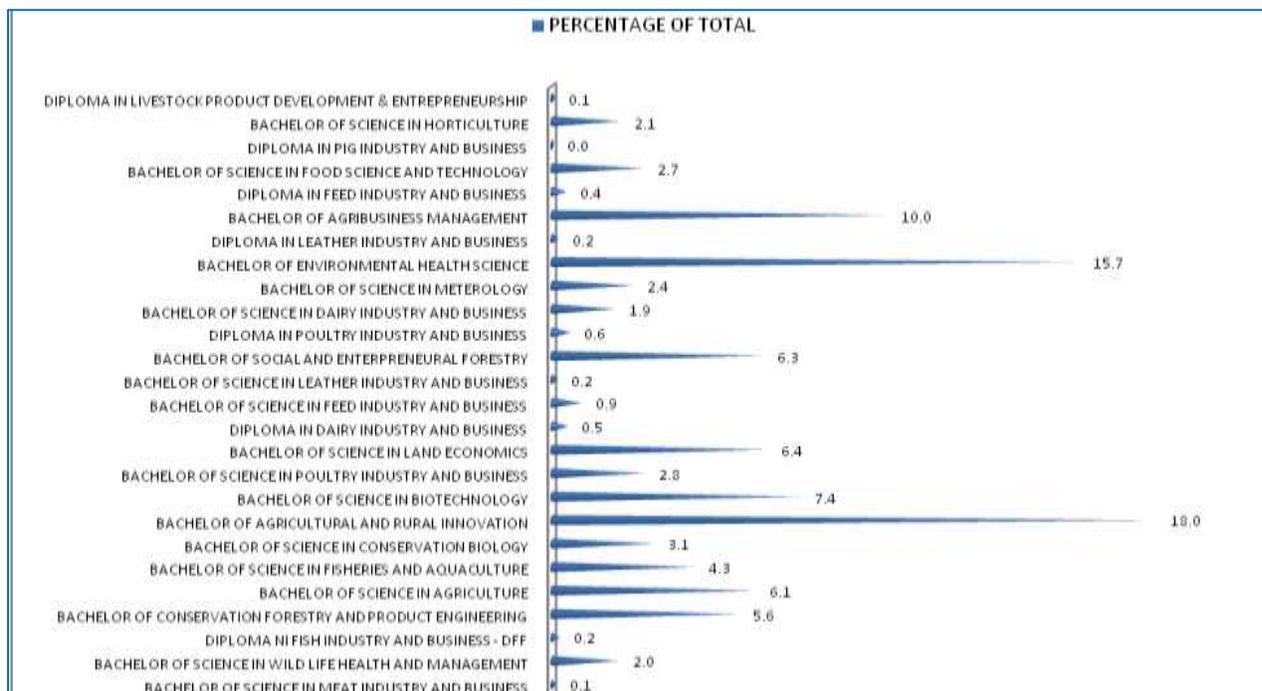
The above figure illustrates the phenomenon of “Humanities effect” on women’s representation and participation in public university colleges in Uganda, a phenomenon in which GPI tends to be heavily skewed towards the college of Humanities and Social science versus all others.

#### 9.4.1 College of Agricultural and Environmental Sciences

In the college of Agricultural and Environmental Sciences, men constituted 66.1 per cent of a student population of 5 105, with women making up only 33.9 per cent (1 729). Seventy-five point five per cent of the college’s student population were from the eight fields of Bachelor of Agriculture and Rural Innovation (18 per cent), Bachelor of Environmental Health Science (15.7 per cent), Bachelor of Agribusiness Management (10 per cent), Bachelor of Biotechnology (7.4 per cent), Bachelor of Science in Land Economics (6.4 per cent), Bachelor of Social and Entrepreneurial Forestry (6.3 per cent), Bachelor of Science in Agriculture (6.1 per cent) and Bachelor of Conservation Forest and Product Engineering (5.6 per cent). The only two fields of study where women had a significant edge over men were Bachelor of Science in Food Science and Technology and Diploma in Pig Industry and Business. GPI was at par (GPI of 1.0) in the fields of Livestock Product Development and Entrepreneurship and Bachelor of Science in Horticulture. Significant gender disparity existed in different fields in the college. As Appendix 6.9 shows, there were significant variations in the GPI between the fields of study in the College

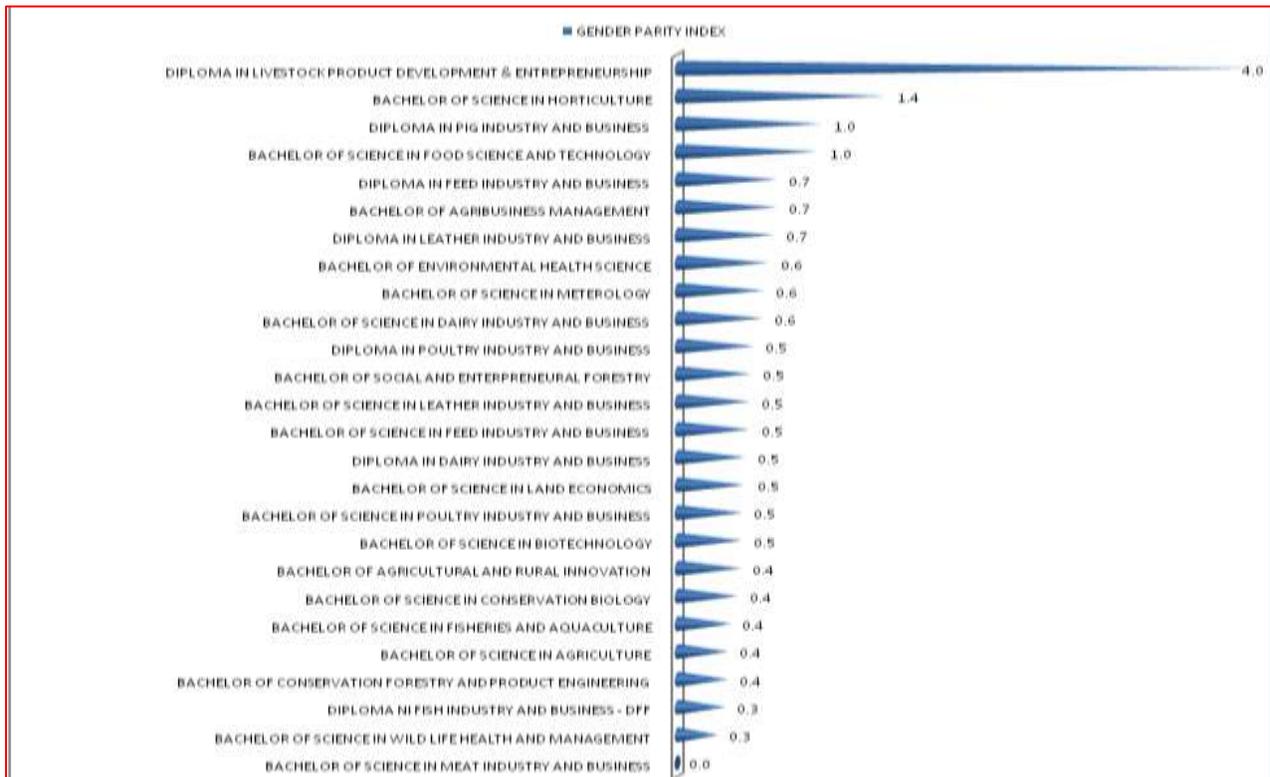
of Agriculture and Environmental sciences.

Overall GPI at the College of Agricultural and Environmental sciences was weak across the board. It gravitated between 0.0 in Bachelor of Science in Meat Industry and Business, 0.3 in Bachelor of Science in Wild Life Health and Management, Diploma in Fish Industry and Business, 0.4 Bachelor of Science in Agriculture, Bachelor of Science in Fisheries and Aquaculture, Bachelor of Agricultural and Rural Innovation; and 0.5 in Bachelor of Science in Biotechnology, Bachelor of Science in Poultry Industry and Business, Bachelor of Science in Land Economic sciences, among others. The three top fields in GPI performance in the college were Bachelor of Science in Horticulture, Bachelor of Science in Human Nutrition and Bachelor of Science in Food Science and Technology. These were also the most popular academic programmes with women. Out of 27 academic programmes in the college, men constituted 66.1 per cent of a student population of 5 105, with women making up only 33.9 per cent (1 729). Figure 9.6 below shows the breakdown in the percentage distribution of the student population from the fields of study in the College of Agriculture and Environmental Sciences:



**Figure 9.6: Percentage distribution of student population in the College of Agriculture and Environmental Sciences**

Figure 9.7 below shows variations in the GPI between and within academic programmes in the college of Agriculture and Environmental Sciences:



**Figure 9.7: Gender Parity Index by fields of study in the College of Agriculture and Environmental Sciences**

The pattern of gender parity observed in the college of Agricultural and Environmental Sciences echoes that in the national trends – a general picture of inequity in the majority of colleges, with severe under representation of women in close to 90 per cent of the academic programmes and over-representation in a few. Nineteen (70.3 per cent) of the 27 academic programmes in this college were far from gender parity, with GPIs ranging from 0.0 to 0.6. Only three fields of study were within an optimistic parity range of 0.7 – Diploma in Feed Industry and Business, Bachelor of Agribusiness Management and Diploma in Leather Industry and Business. The relative position of women in the College of Agriculture was marginal over the last 10 years. The gendered pattern presents an important policy conundrum to the challenge of equity and gender equality in agriculture, a key sector of the Ugandan economy and the backbone of Africa’s development. Figure 9.8 compares GPIs across fields of study at the College of Agricultural and

Environmental Sciences:

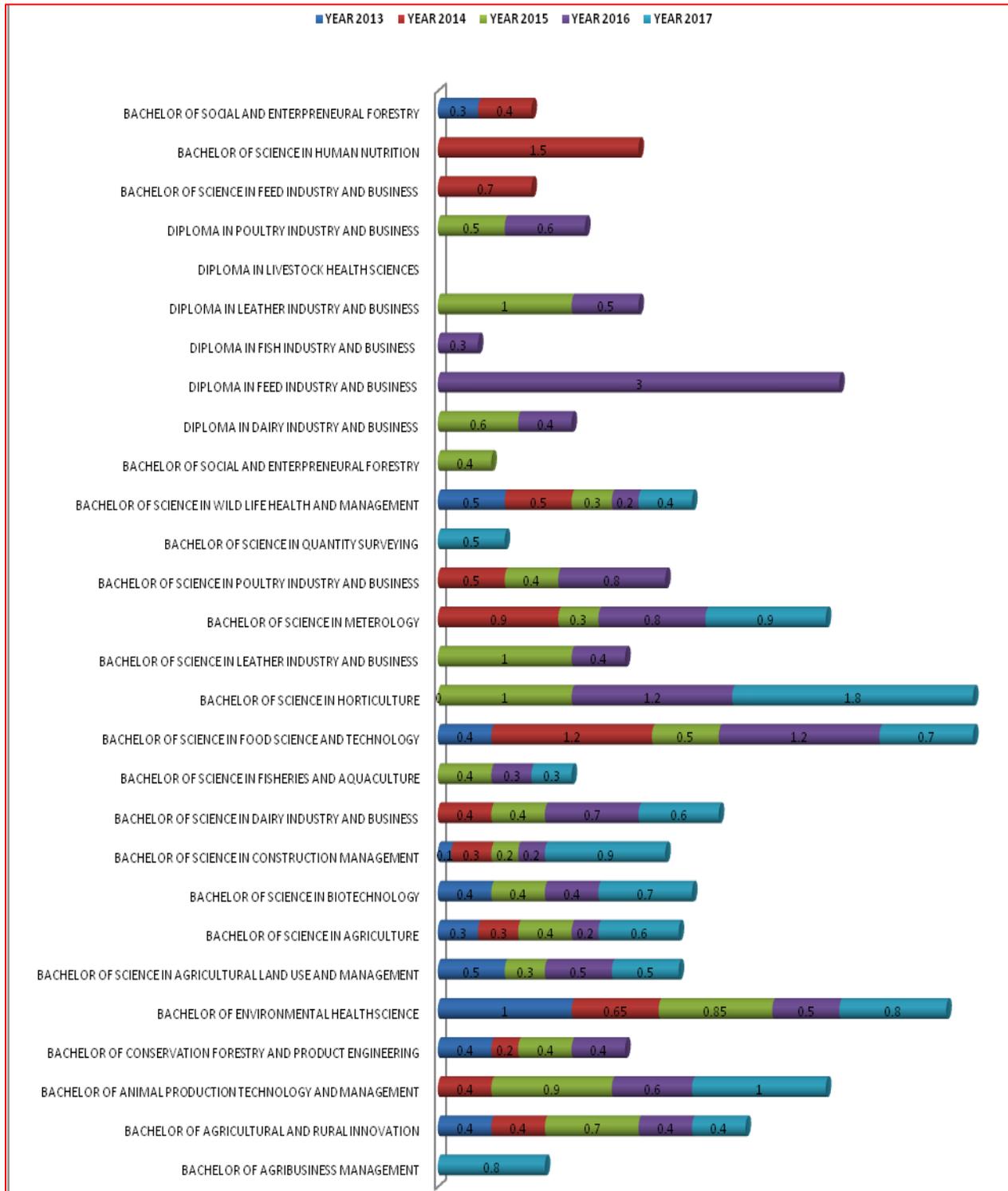
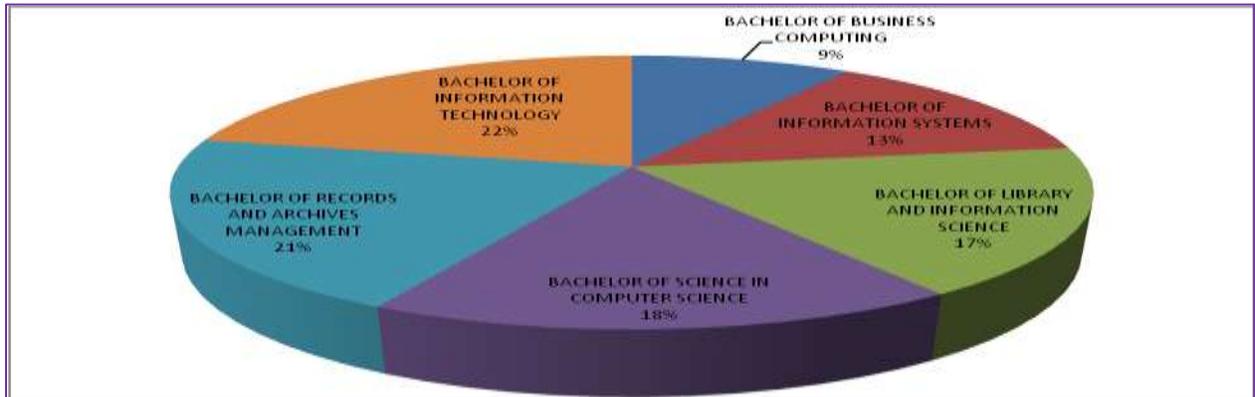


Figure 9.8: Gender Parity Index by fields of study in the College of Agricultural and Environmental sciences

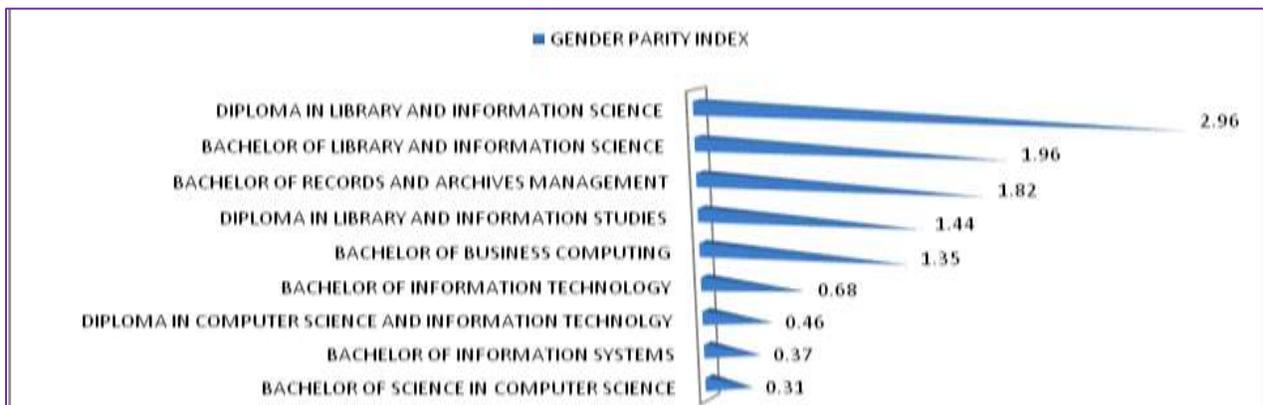
### 9.4.2 College of Computing and Information Management Sciences

Forty-one per cent of the student population in the College of Computing and Information Management were distributed in the two fields of Bachelor of Information Technology (21 per cent) and Bachelor of Records and Archives management (20 per cent). Figure 9.9 below shows a breakdown in the student population in the college by fields of study:



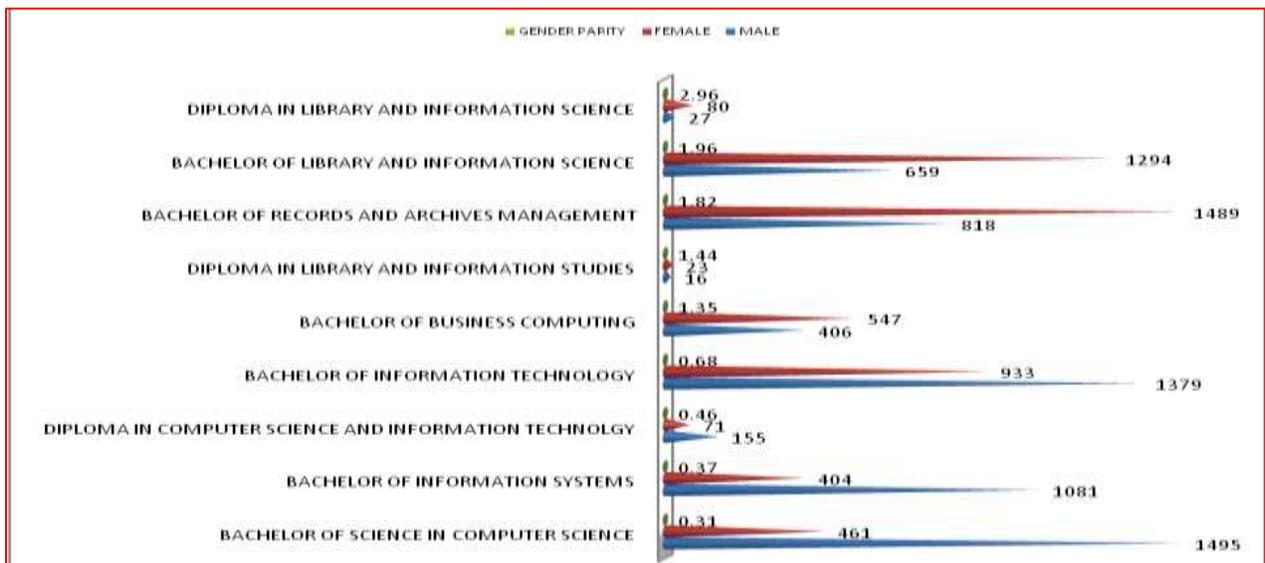
**Figure 9.9: Distribution of student population in the College of Computing and Information Management Sciences**

Out of 11 338 students over an eight-year period, there were 6 036 (53.2 per cent) males and 5 302 (46.8 per cent) females. Figure 9.10 below shows the GPI for each of the nine fields of study in the College of Computing and Information Management Sciences:



**Figure 9.10: Gender Parity Index in the fields of study in the College of Computing and Information Management Sciences**

As Figure 9.10 shows, the college's parity status gravitated from 0.3 in Bachelor of Science in Computer Science to 2.9 in Diploma in Library and Information Science. Wide-ranging gender disparities were observed in the college. By 2017, gender parity in the college was against men in five (56 per cent) of the nine academic fields. Overall, the female student population was significantly higher in five fields in the college – Bachelor of Records and Archives Management (65 per cent), Bachelor of Library and Information Science (66 per cent) and Diploma in Library and Information Sciences (75 per cent). The proportion of male students was 76 per cent in Bachelor of Science in Computer Science, 73 per cent in Bachelor of Information Systems and 60 per cent in Bachelor of Information Technology. The gender parity pattern in the college of Information Sciences was consistent with those in other colleges, dominated by under representation of one gender in one area and over-representation of another in another field. There was a clear line of career division in the college between the two sexes. While the men occupied the Information Technology and Computer Sciences section of the college, women were in the Information Management side of the college. This presents an important conundrum in the Information Technology sub sector, which remains a key engine for a modernizing economy and the backbone of Africa's development. Figure 9.11 below shows the career distribution by number of students in the college by gender:



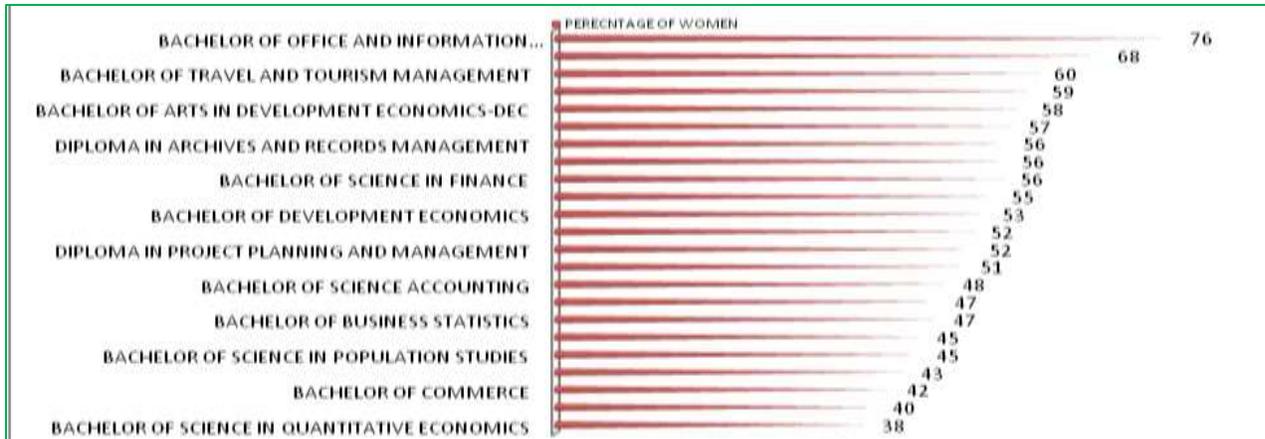
**Figure 9.11: Distribution of student population in the College of Computing and Information Management Sciences**

Significant gender disparities existed in the different fields of study for men and women in the college. Women were more likely to enroll in the Information Management field than men were. The men were more likely to specialise in Information Technology and Computer Sciences than women were, with some notable exceptions in Business Computing, which was distributed to both sexes more equally. Overall, the notion of a career divide between men and women was clearly observable in the College of Computing and Information Sciences. Interestingly, unlike in other colleges, differences in GPI within the college were consistent on both sides of the divide. Bachelor of Records and Archives Management (GPI 1.82), Bachelor of Library and Information Science (GPI 1.96) and Diploma in Library and Information Sciences (GPI 2.96) were the top three fields of study for women. Bachelor of Science in Computer Science (GPI 0.3), Bachelor of Information Systems (GPI 0.37), Bachelor of Computer Science (0.46) and Bachelor of Information Technology (GPI 0.68) were predominantly male domains. The practice of attributing careers based on gender promotes the widespread acceptance of stereotypical notions of scientists and engineers as predominantly male. These minimise women's role in all aspects of public life. Asked to describe what this career divide between men and women in the colleges meant personally; it was observed;

*The divide is symbolically stereotypical of an age-old phenomenon of patriarchy,--- a power structure that reinforces the images of women in one field and men in another,---- the somehow generally accepted notion of science and engineering as a male domain (Denile, from interviews). It also symbolises the gender-differentiated prospects for women's future roles as well as their labour, future income, voice and representation in sectors such the Information Technology (IT) (Dawe, from interviews). It signals the degree to which admission practices may structurally deter the equity and empowerment agenda in the country (Lora, from interviews). For me, the divide raises a fundamental question on how public institutions such as university colleges are equipped to deal with modern day patriarchy and structural conundrums that influence gender dynamics in the career fields critical to economic growth and development of the country (Jim, from interviews).*

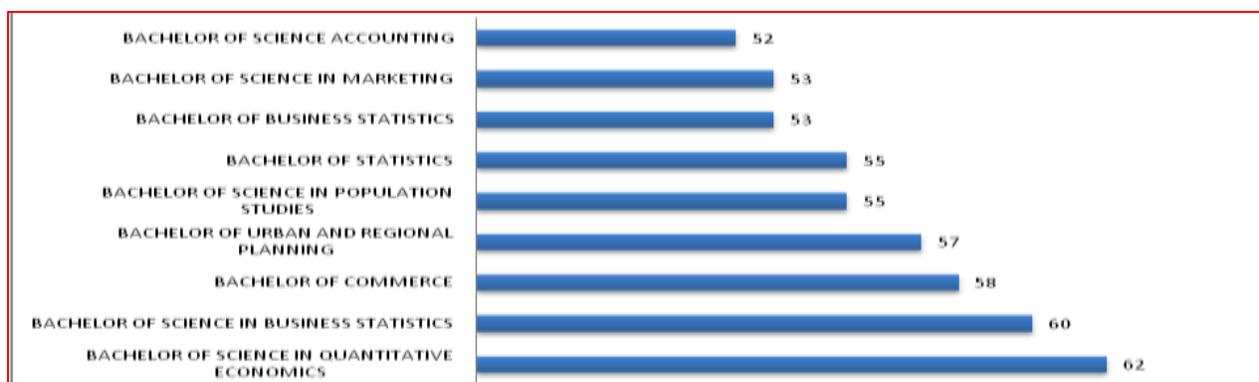
### 9.4.3 College of Business and Management Sciences

In the college of Business and Management Sciences, women constituted 48.9 per cent. Out of the 24 856 students over the eight years, 51 per cent were male and 49 percent female. Figure 9.12 shows a breakdown in the distribution of the student population in the different fields of study in the college of Business and management Sciences:



**Figure 9.12: Distribution of female student population in the College of Business and Management Sciences**

Similarly, women dominated in the fields of Bachelor of Office and Information Management (76 per cent), Bachelor of Catering and Hotel Management (68 per cent), Bachelor of Travel and Tourism Management (60 per cent), Bachelor of Entrepreneurship and Small Business Management (58 per cent), Bachelor of Procurement and Supply Chain Management (57 per cent), Diploma in Archives and Records Management (56 per cent), Bachelor of International Business and Bachelor of Science in Finance (56 per cent), Bachelor of Development Economics and Management (55 per cent), Bachelor of Development Economics (53 per cent), Bachelor of Real Estates Management and Bachelor of Transport and Logistics Management (52 per cent). Figure 9.13 shows the percentage of men in the male dominated fields of study in the college of Business and Management Sciences:



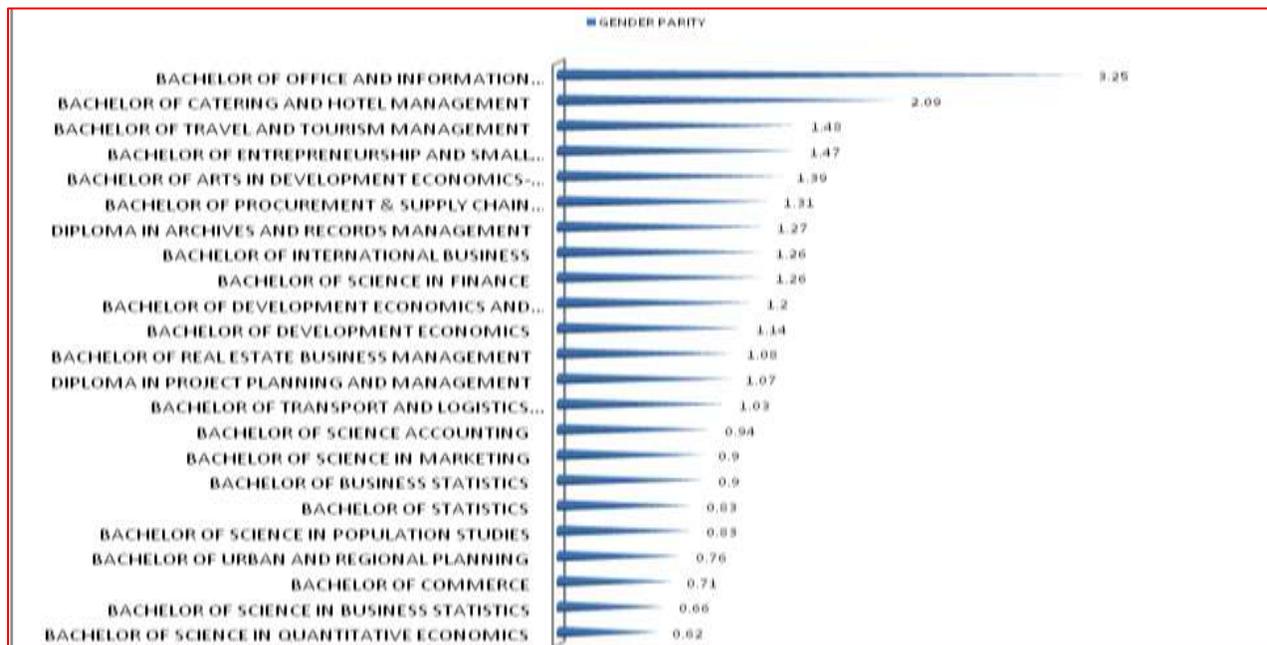
**Figure 9.13: Percentage distribution of male population in the male dominated fields of study in the College of Business and Management Sciences**

By contrast, males constituted a majority in the fields of Accounting (52 per cent), Marketing (53 per cent), Business Statistics (60 per cent), Statistics (55 per cent), Regional Planning (57 per cent), Commerce (58 per cent) and Quantitative Economics (62 per cent) (Appendix 6.16). The College of Business and Management Sciences achieved gender parity overall, in particular, in the fields of Business Management, Project Planning and Management, Transport and Logistics Management, Accounting, Marketing and Statistics. It came close to gender parity in Statistics, Population Studies, and Regional Planning, Commerce and Business Statistics, leaving women behind in one field – Quantitative Economics.

Overall, the GPI (0.96) in the College of Business and Management Sciences was the second highest. The GPI trend in the college was similar to that of the College of Humanities and Social Sciences, divided along gender lines as reflected in the fields of study in which males and females were distributed. The males dominated the accounting and commercial side of the college while the women dominated the services sector of the college.

The general picture in the college can be summarised as twofold – a predominantly male picture on the commercial side of the college and a predominantly female picture on the services sector of the college. While the men were the majority in nine academic fields, the women were also the majority in nine, but with a slight edge over men in five other academic fields. Although there was parity in a majority of 23 out of 32 fields of study, females still accounted for less than half of the student population in nine male dominated fields. As Figure 9.14 below shows,

although there was parity in a majority of 23 out of 32 fields of study, females still accounted for less than half of the student population in nine male dominated fields.

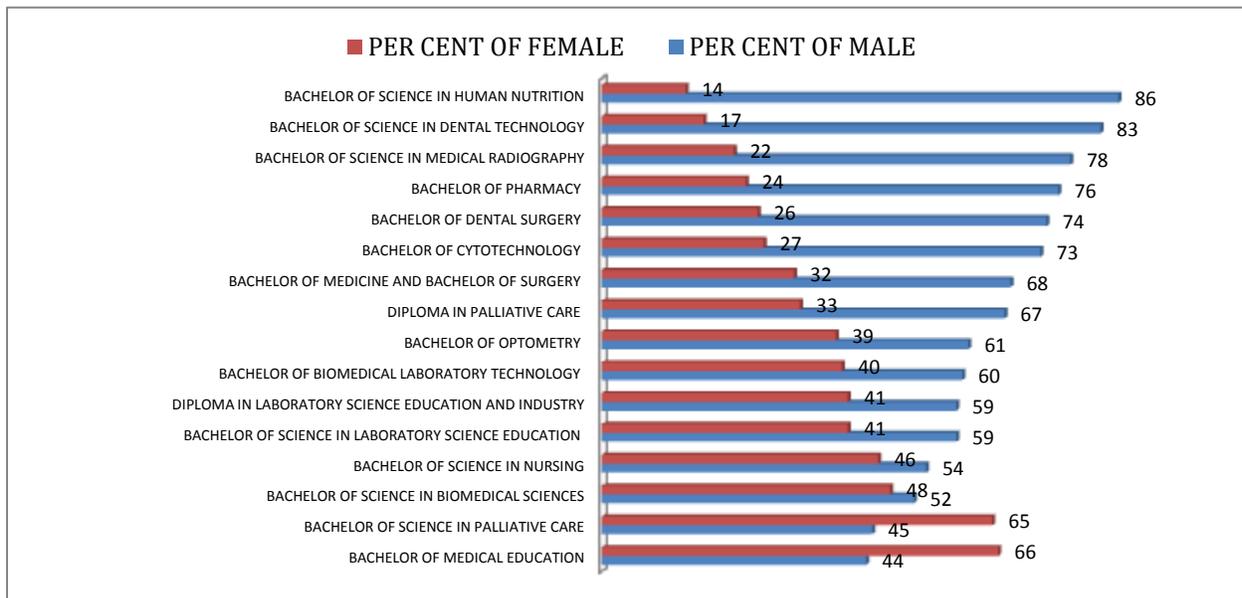


**Figure 9.14: Gender Parity Index in the fields of study in the College of Business and Management Sciences**

The binary gender lines of study for women and men in the College of Business and Management Sciences were similar to those observed in Computing and Information Sciences. This too is a reflection of policies, systems and practices of modern day patriarchy that puts the images of women in public university colleges in a structurally disadvantaged position. It also differentiates prospects for women's labour in unequal terms based on gender by putting their future income, access to power, voice, resources and representation in a far less superior position than that of the men's (Collins & Bilge, 2016). The divide also raises questions of how public university colleges have so far dealt with the issue of gender equality and relations between men and women as a structural determinant of poverty, gender imbalance in public service and underdevelopment (Deji, 2011). This pattern, as earlier observed, undermines the role of women in the business sector and in the key sectors critical to economic growth and development of the country (Deji, 2011).

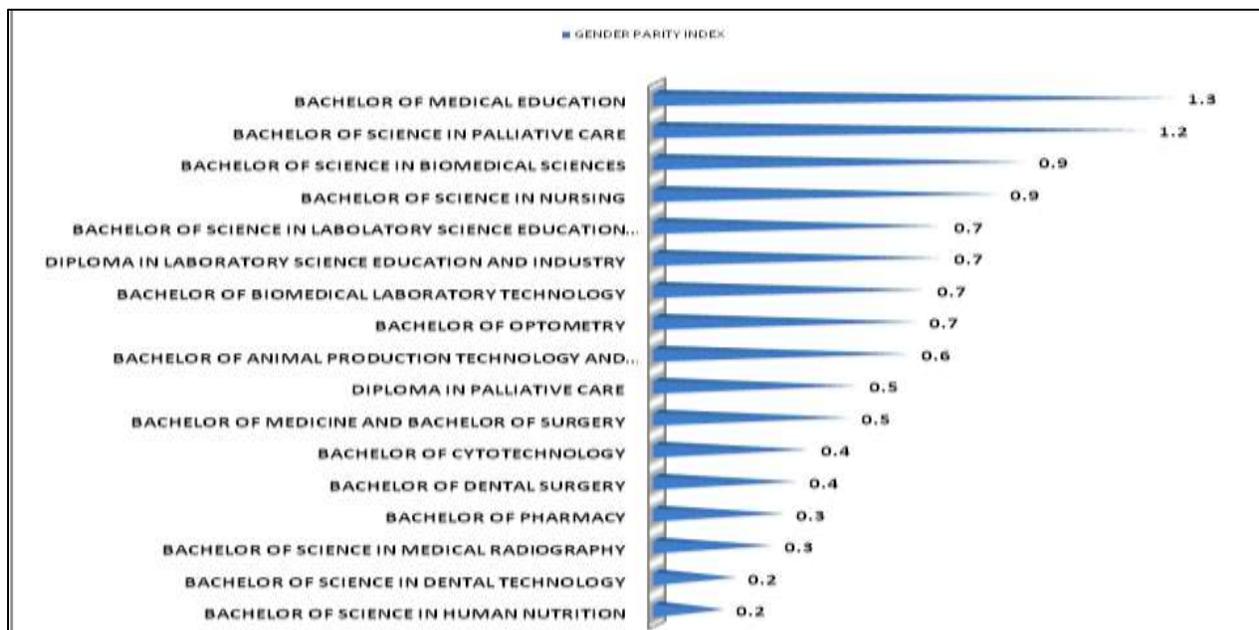
#### 9.4.4 College of Health Sciences

The general parity picture in the College of Health Sciences was predominantly male. The men were the majority in all 17 fields of study, but two – Bachelor of Medical Education and Bachelor of Science in Palliative Care. Women were less than one third (30 per cent) of the entire student population in the college over this period. In sharp contrast to the Colleges of Humanities and Social Sciences and Business and Management Sciences, women faced even more barriers in the pyramid of Health Sciences careers. The men edged women by a large ratio of 73 to 27 per cent in the college. Figure 9.15 below is an illustration of the proportional representation of men and women in the different fields of study in the college:



**Figure 9.15: Distribution of student population in the College of Health Sciences by number and gender**

Seventy-three per cent of students were men compared to 27 per cent of women in the college. The College of Health Sciences had one of the lowest proportions of female students of any college, with men dominating the fields of Human Nutrition (86%); Dental Technology (83%), Radiography (78%), Pharmacy (76%), Dental Surgery (74%), Cytotechnology (73%) and Medicine and Surgery (68%). Figure 9.16 presents the GPI for the different fields of study in the college:



**Figure 9.16: Gender Parity Index in the College of Health Sciences**

There were only three women out of every ten students in the college. GPI observed in the College of Health Sciences, ranged from 1.3 in Medical Education to a mere 0.2 in Human Nutrition and Dental Technology, to 0.3 in Radiography and Pharmacy, 0.4 in Dental Surgery and Cytotechnology and 0.5 in Medicine and Surgery. In the majority of academic fields (82 per cent), women accounted for 14 to 41 per cent of the student population. At 0.3, the College of Health Sciences recorded one of the lowest GPIs of any public university college in the country.

Studies shows that factors that explain the lower GPI included the perception of the role of women in science, the selection criteria and weaknesses in the governance of women's participation in public universities. In most marginalised communities, women are defined by their biological role in reproduction (Haslanger & Haslanger, 2012: 234). Even when girls perform just as well as boys, their confidence relating to their abilities to learning subjects, such as mathematics and science, is often undermined by societal expectations-that sciences is a male domain. Although culture contributes to this differentiation, the marginalisation exacerbates the situation. According to Mokgaetsi (2009), the factors that inhibit girls in science education in SSA are similar across countries in the region: gender bias; lack of resources; poor teaching methods and classroom practices; lack of appropriate guidance and counseling and the lack of

encouragement and motivation of the girls to pursue sciences in higher education.

The under-representation of women in the College of Health Sciences highlights the importance of women’s participation in science subjects both in secondary and post-secondary education. It reveals that barriers to science education remain a major structural cause of subject inequality in the education system. Less than 25 per cent of the girls take science subjects in Uganda. The implication is that fewer females are admitted on government sponsorships since 75 per cent of public scholarships go to science courses. In spite of this;

*policies that target specific college-based inequalities related to fields of study, and the transition of girls and women from high school to higher levels of education,--- are largely absent. Just as the 1.5 bonus intervention points of the 1.5 bonus intervention of the Affirmative Action programme was a step in the right direction, we need more specific college based Affirmative Action targets to tackle the structural disadvantages facing men and women that continue unabated in different colleges and fields of study (Motoli, from interviews).*

#### 9.4.5 College of Education and External Studies

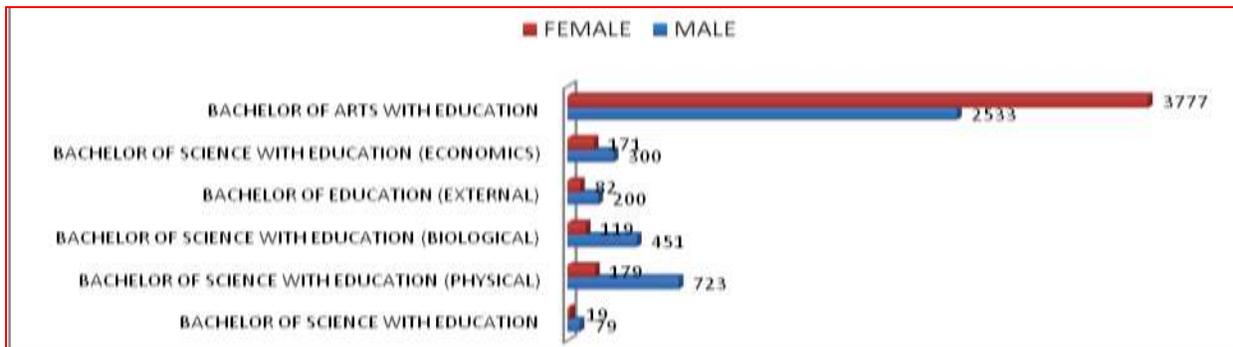
Table 9.10 shows the distribution of male and female students in the different fields of study in the College of Education and External Studies:

**Table 9.10: Gender parity index at the College of Education and External studies**

ACADEMIC PROGRAMME	MALE	FEMAL E	TOTAL	PARIT Y
BACHELOR OF SCIENCE WITH EDUCATION	79	19	98	0.24
BACHELOR OF SCIENCE WITH EDUCATION (PHYSICAL)	723	179	902	0.25
BACHELOR OF SCIENCE WITH EDUCATION (BIOLOGICAL)	451	119	570	0.26
BACHELOR OF EDUCATION (EXTERNAL)	200	82	282	0.41
BACHELOR OF SCIENCE WITH EDUCATION (ECONOMICS)	300	171	471	0.57
BACHELOR OF ARTS WITH EDUCATION	2533	3777	6310	1.49
<b>TOTAL</b>	<b>4286</b>	<b>4347</b>	<b>8633</b>	<b>0.54</b>

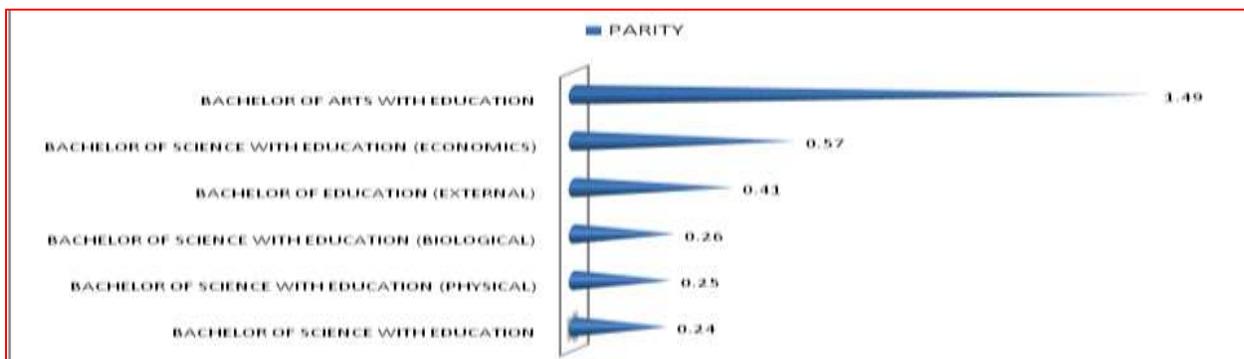
In the two largest fields of study for women in the College of Education and External Studies, Bachelor of Education (External) and Bachelor of Science with Education (Economics),

women’s representation was 41 and 56 per cent respectively. Access to science education remains the single most important cause of subject based gender inequality in public universities in Uganda. In the College of Education, women faced an arguably impossible task in the equality challenge with men in all fields of study, except one – Bachelor of Arts with Education (GPI 1.5). Figure 9.17 below shows the composition of students by gender in the college:



**Figure 9.17: Distribution of student population in the College of Education and External Studies**

Overall, women were one fourth (25 per cent) of the student population in three out of six fields of study – Bachelor of Science with Education (24 per cent), Bachelor of Science with Education – Physical (25 per cent) and Bachelor of Science with Education – Biological, 26 per cent. As Figure 9.18 below shows, five of the six fields of study in the college were far from gender parity.



**Figure 9.18: Gender Parity Index in the College of Education and External Studies**

Overall, the GPI for the College of Education was 0.5 and 0.2 in three out of six fields. In general, the position of women in the college was marginal. Men edged women in all fields but

one. The detailed picture in the college shows that women were excluded from science education due to considerable barriers – the lack of effective policies to abet specific college based inequalities related to intake, and the transition from high school to higher levels of education. The extent of exclusion in the college requires that steps be taken to address the structural barriers that put women’s careers at a disadvantage. This presents an important policy conundrum that requires an urgent attention from primary, secondary through tertiary levels of education.

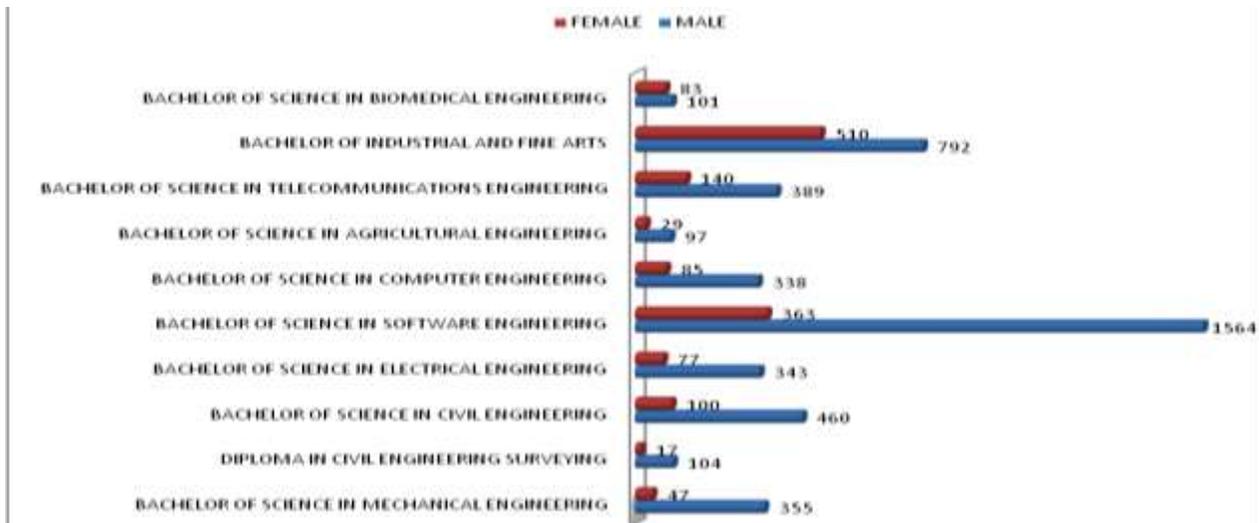
#### 9.4.6 College of Engineering, Design, Art and Technology

The College of Engineering, Design, Art and Technology remains one of the most unequal colleges for women. Overall, women were one-third (33 per cent) of the student population. Access to the College of Engineering was a big challenge for women in all ten fields of study. There was an average of one woman out of every 10 students in two fields of study, two women out of every 10 in four fields of study and three out of 10 in two fields of study. The table below shows the distribution of the student population by gender and fields of study in the college:

**Table 9.11: Gender parity index at the College of Engineering, Design, Art and Technology**

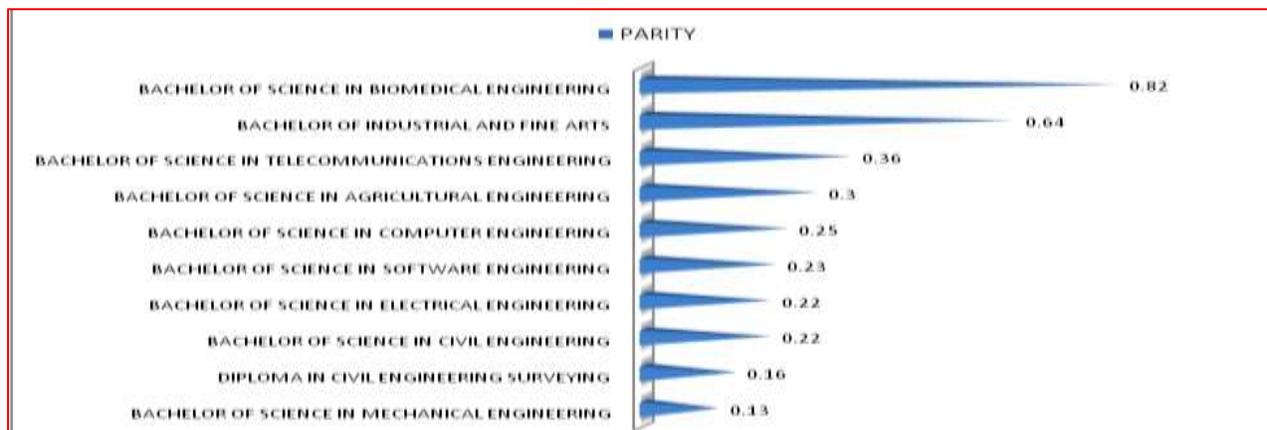
ACADEMIC PROGRAMME	MALE	FEMALE	TOTAL	PARITY
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING	355	47	402	0.13
DIPLOMA IN CIVIL ENGINEERING SURVEYING	104	17	121	0.16
BACHELOR OF SCIENCE IN CIVIL ENGINEERING	460	100	560	0.22
BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING	343	77	420	0.22
BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING	1564	363	1927	0.23
BACHELOR OF SCIENCE IN COMPUTER ENGINEERING	338	85	423	0.25
BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING	97	29	126	0.3
BACHELOR OF SCIENCE IN TELECOMMUNICATIONS ENGINEERING	389	140	529	0.36
BACHELOR OF INDUSTRIAL AND FINE ARTS	792	510	1302	0.64
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING	101	83	184	0.82
<b>TOTAL</b>	<b>4543</b>	<b>1451</b>	<b>5994</b>	<b>0.33</b>

Access to the College of Engineering was a big challenge for women in all ten fields of study. Figure 9.19 below shows how women and men were represented in different fields of study in the college to demonstrate the relative difficulty of access to the college for women:



**Figure 9.19: Distribution of student population in the College of Engineering, Design, Art and Technology**

Figure 9.20 below shows that the only field, which came close to gender parity in the college, was Bachelor of Science in Biomedical Engineering, with a GPI of 0.82.



**Figure 9.20: Gender Parity Index in the College of Engineering, Design, Art and Technology**

At 3.3, the GPI in the college stagnated as male students dominated the college through the years. It ranged from 0.1 in Bachelor of Science in Mechanical Engineering, to 0.16 in Diploma in Civil Engineering Surveying, 0.22 in Bachelor of Science in Civil Engineering and Bachelor of Science in Electrical Engineering, 0.23 in Bachelor of Science in Software Engineering, 0.25 in Bachelor of Science in Computer Engineering 0.3 in Bachelor of Science in Agricultural

Engineering and 0.36 in Bachelor of Science in Telecommunication Engineering. The general position of women in the college was marginal except in the field of Bachelor of Industrial and Fine Art, with a GPI of 0.64. At 29 per cent, the school of Industrial and Fine Art had the highest proportion of females in the college. The situation of women's representation was that of exclusion, due to considerable barriers women face in science education in general and the lack of effective policies to address college based inequalities related to female intake, and the transition from high school to higher levels of education.

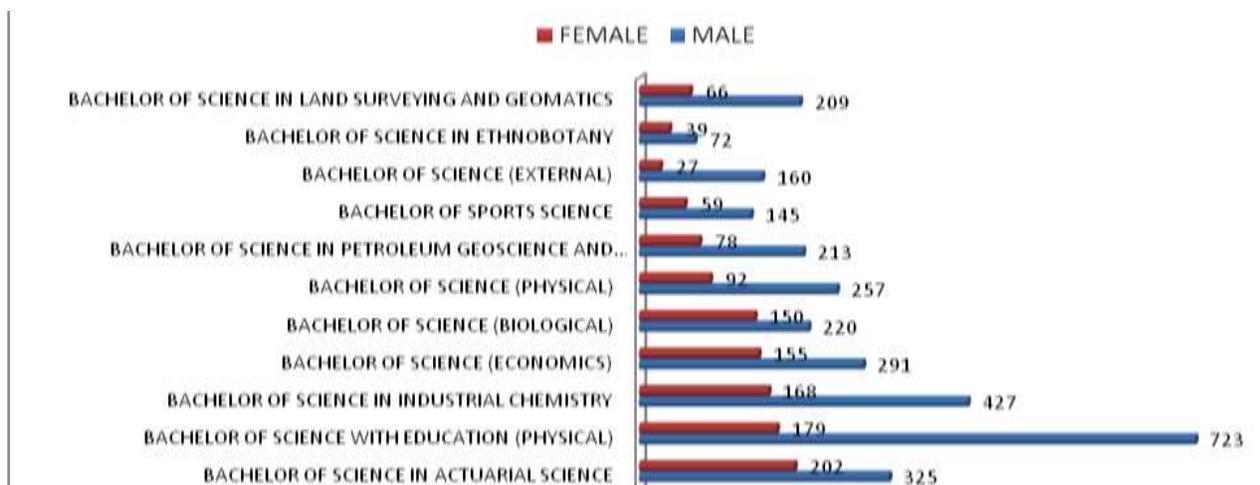
#### 9.4.7 College of Natural Sciences

Significant disparity was observed in the College of Natural Sciences, with women at 28.5 and men 72.5 per cent of the student population in the college. Table 9.12 shows the Gender Parity Index based on the distribution of the student population by fields of study in the college of Natural Sciences:

**Table 9.12: Gender equity gap at the College of Natural Sciences**

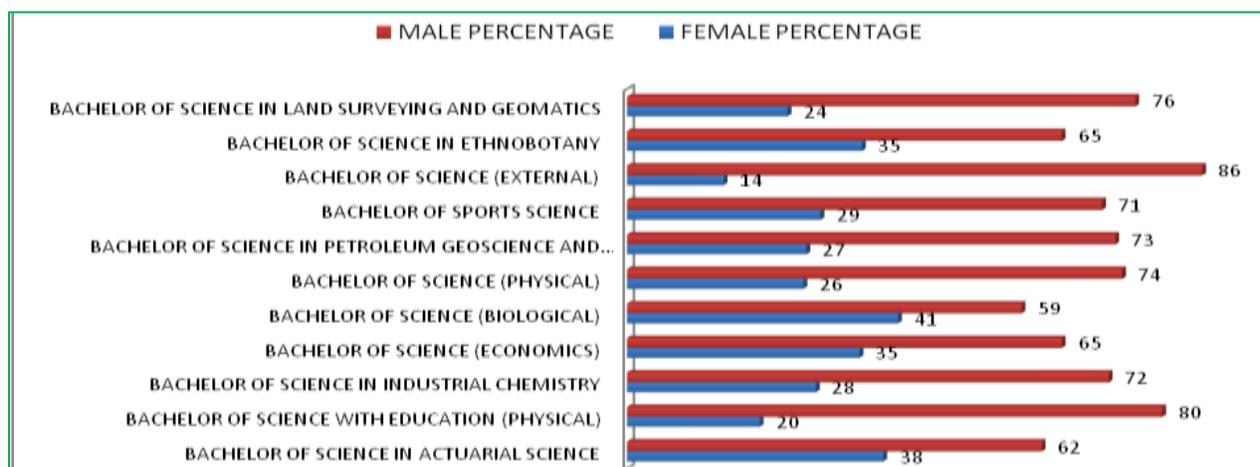
ACADEMIC PROGRAMME	MALE	FEMALE	TOTAL	PARITY INDEX
Bachelor of Science In Actuarial Science	325	202	527	0.62
Bachelor of Science With Education (Physical)	723	179	902	0.25
Bachelor of Science In Industrial Chemistry	427	168	595	0.39
Bachelor of Science (Economics)	291	155	446	0.53
Bachelor of Science (Biological)	220	150	370	0.68
Bachelor of Science (Physical)	257	92	349	0.36
Bachelor of Science In Petroleum Geoscience And Production	213	78	291	0.37
Bachelor of Sports Science	145	59	204	0.41
Bachelor of Science (External)	160	27	187	0.17
Bachelor of Science In Ethnobotany	72	39	111	0.54
Bachelor of Science In Land Surveying And Geomatics	209	66	275	0.32
<b>Total</b>	<b>3042</b>	<b>1215</b>	<b>4257</b>	<b>0.4</b>

Access to the college of natural sciences was limited for women. This was the case in all eleven fields of study. Figure 9.21 below shows the student population by gender for all fields of study in the college:



**Figure 9.21: Distribution of student population in the College of Natural Sciences**

Figure 9.22 below shows the percentage distribution of the student population by gender in the different fields of study in the College of Natural Sciences:



**Figure 9.22: Percentage distribution of student population in the College of Natural Sciences**

Out of every 10 students in the field of Bachelor of Science in Industrial Chemistry, three were women. In Bachelor of Science in Actuarial Science, 40 per cent were women. The proportions of women were three out of every 10 in Bachelor of Science-Economics, four out of 10 in Bachelor of Science-Biological and three out of 10 in Bachelor of Science-Physical, Bachelor of Science in Petroleum Geosciences and Production, Bachelor of Science in Ethnobotany and Bachelor of Sports Science. It was one out of 10 in Bachelor of Science-External and two out of

10 in Bachelor of Science in Land Surveying and Geometrics.

Although the general trend in GPI in the College of Natural Sciences was weak across all fields of study, it was consistent with the general picture observed in eight out of 10 public university colleges in Uganda and more so in the Colleges of Engineering and Health Sciences. The distribution of women in eight fields of study were as follows: Bachelor of Science in Industrial Chemistry (18 per cent); Bachelor of Science in Actuarial Science (16 per cent); Bachelor of Science-Economics (13 per cent); Bachelor of Science-Biological (11 per cent); Bachelor of Science-Physical (10 per cent); Bachelor of Science in Petroleum Geosciences and Production (nine per cent); Bachelor of Sports Science (six per cent); Bachelor of Science-External (six per cent) and Bachelor of Science in Land Surveying and Geometrics (eight per cent). Similar to the trends in the College of Engineering, there was no single field of study in which women had an edge over men in the college of Natural Sciences.

The above findings show that Uganda's public university educational distribution system is gender-insensitive. This was evident in the composition of the student population housed in the 10 colleges and in 158 fields of study, in which half of the female population was found in one college and eight out of every 10 in two out of 10 colleges. Because of the depth of the layers of inequality that entangled women at all levels of Uganda's education system, the notion of epistemic advantage or privilege in the feminist epistemology (Mamo, 2005; Mamo, 2010) was found to be limited in the gendered context of subject-based inequality in higher education. Its application was mainly limited to women and men from districts located in the central and western regions of Uganda.

*This is attributed to regional disparities related to poverty, secondary education and the transition of girls from primary to secondary and to higher levels of education” (Clever, from interviews). As noted by one respondents, “although access to primary education remained relatively equal across the country, inequality in the distribution of secondary education accounts for most regional disparities in higher education as well as in other sectors of development (John, from interviews).*

The findings from literature show that the distribution pattern of public university educational

opportunities followed the poverty and as well as educational enrolment trends throughout the country. At 9 and 14 percent respectively, the Northern and the Eastern, regions had the lowest net secondary school enrolment rates, compared to that of Kampala and the Central region of 44 and 27 percent respectively (World Bank, 2011b). Although Uganda reduced poverty by half, from 56.4 percent in 1992 to 24.5 percent in 2009/10, literature showed that progress was unequal throughout the country (World Bank, 2012). While the number of poor people in the Central region fell by 87 per cent; that of the North increased significantly (World Bank, 2012). For instance in the Central region, poverty declined from 24 percent to just 12 percent, while that in the north increased from 29 percent to 38 percent. As a result, the Northern and Eastern regions accounted for two-thirds of the poor in the country. This is a 14 per cent increase from the 1992/93 baseline, yet the population growth in the region increased by less than 4 per cent over the same period. Although poverty in the North shrunk, it is eight times higher than in the Central region and is much more deeply rooted there than anywhere else in the country. The intersectionality between poverty, gender, location and education in the above; shows that the conundrum of gender disparities in the colleges are indeed related to the wider regional disparities in poverty levels, secondary education and the transition of girls from primary to secondary and to higher levels of education. This varies according to location, from region to region and district to district. This is congruent with the feminist Standpoint theory; the idea that social phenomenon is culturally, socially and historically situated and that its magnitude and intensity varies according to location (Mamo, 2005; Intemann, 2010).

## **9.5 Conclusion**

Women's representation in public university education in Uganda, especially in colleges where jobs have considerable national appeal, remains a complex issue. Since women and girls seeking to become scientists, technologists, engineers and mathematicians need to take science based subjects in secondary school, it is not surprising that an under representation of women is too often associated with low numbers of women who meet the selection criteria for admission to public university colleges. The irony is that, for the few who qualify, the representation of women tended to be higher in the fields of study where status and potential for future income, power and access to resources are considerably lower. By contrast, males tended to dominate the

fields that are far more lucrative, relatively employable and better paid.

The College of Humanities and Social Sciences was the only public university college where Gender Parity was in favour of women. While gender parity in public universities in Uganda has improved overall, large disparities existed between men and women in different fields of study and from one district to another. The challenge of gender equality in Uganda's public university education system presents an important policy conundrum for the country – the need to align gender equality in public universities from a wider viewpoint of geography (all districts) and in all career fields critical to economic growth and development of the country.

Despite the recognition that gender is the main factor in Uganda's public university educational gap, the study found that public university educational distribution policies and systems appear to mainly benefit men and women who are relatively well off. The study agrees with the notion that many interventions that claim to address gender issues do not necessarily address the underprivileged (Anthias & Yuval-Davis, 1983; 1989; Maile, Tuck & Morrill, 2013). In eight public university colleges, men outnumbered women by a ratio of 8:2. Half of the population of women admitted to five public universities was found in one out of ten colleges. While the College of Humanities and Social Sciences represented 48.9 per cent of the total female student population in public universities over this period, the College of Business and Management Sciences accounted for 31.2 per cent of the total female public university student population.

More is needed to integrate men and women fully from rural districts of Uganda into the public university admission system, to bolster the numbers of uptakes in a manner that bridges district gender gaps in public university education. Gender exclusion, or geographical as well as subject-based forms of gender inequality, continues to persist, owing to the absence of an educational distribution system that takes equity and equality fully into account. Mandatory minimum requirements for specific gender-based quotas for districts and public university fields of study, critical to economic growth and development, need to be brought on board, to boost female intake in minority-oriented specialties. More emphasis is needed on addressing the gender gap in the different fields of study as a structural cause of imbalances in the distribution system, especially at the echelons of the most selective departments of public universities. Quota systems for university education programmes, including health sciences and engineering which do not

have quotas, are needed for men and women so that all districts can reach the required levels of human capital investment and development. The lack of a gender and district based quota system means that the purpose of the admission policy, systems and practices is not to guarantee that all districts have a sufficient number of male and female professionals educated in all fields for both local and nationwide needs.

# **CHAPTER TEN**

## **SUMMARY OF DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **10.1 Introduction**

Although the education system is the only infrastructure governments have to transform society in a fundamental way, only 5 per cent of Ugandans have access to tertiary education (World Bank, 2012), falling into the elite stage (UNESCO 2014; World Bank 2009; Schofer & Meyer, 2005; Marginson, Schoole & Sawir, 2011; 2016a; 2016b; 2016c; 2014; McCowan, 2007). As higher education expanded, the study found that access tended to favour students from a few top high schools, located in a few districts in the country-the elite. This was the case as the quality of learning in most primary and secondary schools in the country is too poor and the duration of compulsory schooling is too short to create the necessary mandate for government to invest adequately to ensure all children, especially those from rural schools, remain in school long enough and transition from primary, to secondary and higher levels of education. While primary and secondary education is supposed to be free, it is not compulsory. Consequently, schooling for the majority ends when children are only 13 or less. While over 80 per cent of children born anywhere in Uganda today are enrolled in primary school, only 11 per cent of the population group aged 15 and above complete secondary education. This is with the exception of Central region of Uganda (World Bank, 2009). On average, net secondary school enrollment stands at 9 and 14 per cent in Northern and Eastern regions respectively- in contrast to 44 per cent in Kampala and 27 per cent in the Central (World Bank, 2009a; World Bank, 2009a; 2009b; 2012). This is the root cause of the regional disparities found by the study in the distribution of the public university student population. As a result, the top 20 per cent of districts were allowed to control 90.5 per cent of the total student population. This led to gross inequality in the distribution of public university educational opportunities in the country.

This finding confirmed what earlier studies show in Africa and elsewhere in developing countries (Marginson 2016b; Shavit et al. 2007; Kotecha et al., 2012 and Kariwo, 2007). The reason for the regional disparity in the social phenomenon in the context of Uganda was located

in the absence of consideration for the notion of equity in the distributed of the limited public university educational opportunities in the country. This was revealed in the analysis of the national merit, district quota and Affirmative Action policies, systems and practices responsible for the distribution of public university educational opportunities in 4 regions and 112 districts; and in 158 fields of study, as well as in Uganda's education system in general. The policies, systems and practices, implemented, did not take the concept of equity in higher education into account, for all districts and in all fields of study.

The situation may sound paradoxical given that Uganda led the way in poverty reduction performances globally; cutting poverty rates by half, from 56.4 percent in 1992 to 24.5 percent in 2009/10, in line with the first UN Millennium Development Goal (MDG) (World Bank, 2006; 2012). However, like in education, this progress was largely skewed. While poverty in the Central region dropped from 24 to 12 percent, it spiraled from 29 to 38 percent in Northern Uganda. The two regions of Northern and Eastern Uganda today account for two-thirds of Uganda's poor, with a 14 per cent increase from 1992 (World Bank, 2011b). This is due the legacy of a 20-year long conflict and under investments in the region, particularly in education (World Bank, 2011a).

Although it is accurate to say that the lack of space due to lack of capacity for longer term planning and inadequate tax-based models for financing of educational infrastructure, account for the conundrum (see Oketch, 2016; Kotecha et al., 2012 and Kariwo, 2007), this study argues that equity does not mean free higher education for everyone. Rather, it is a system where no one who meets the minimum criteria is denied access to institution of choice just because he or she comes from a disadvantage background. This is apparently the case in Uganda; in line with what other studies show in Africa and other parts of the world (Barr, 2004 p.266)-the idea that the majority who meet the first criteria (of at least two principle passes as required in Uganda) are denied access just because of where they come from and where they attend school. Therefore inequality in higher education in Uganda is insolvable without addressing the underlying regional disparities in educational access, outcomes and opportunities from primary, to secondary, and all the way through to higher levels of education. There is urgent need to address the high school and district factors, particularly in the context of the national merit system of

distribution, which appear biased towards students from the upper echelons of the high schools system. This bias renders less equal, the vast majority of students who meet the minimum requirement and qualify from disadvantage schools located in remote areas. It explains why the benefits of education are not equally distributed in disadvantaged areas located in all regions and districts. In this context, 'equity' needs to be taken into account as a complete policy dimension of educational distribution; given that equity in participation in Higher education by all populations groups is a cornerstone for national development. It was due to this gap that the study created the fair Share Equity Framework; which defines equity as 'Fair share' and argues, along with an earlier finding by McCowan (2007, p.582) that in order to achieve equity in tertiary education, the proportion of "all members of society who so desire, and who have a minimum level of preparation" to participate in higher education should be determined on the basis of 'Fair Share' formula.

## **10.2 Fair Share and its theoretical contributions to research and development**

This study developed the 'Fair Share Index' as a measure of educational inequality. Following its development, the Fair Share Equity Framework of analysis was created, applied and used extensively in the study. This framework incorporates 'equity' as a 'third' dimension of educational distribution. It marks the first when 'equity' is incorporated as dimension of educational distribution in its self and on its own. By so doing, the researcher addresses pertinent and puzzling complexities of the social phenomenon of inequality in higher education and in development, in ways not previously reported. The effort was innovative and provided a new contribution to knowledge. In the entire study, the researcher endeavored to systematically illustrate the theoretical and empirical paradigms of the Fair Share Framework.

The framework was built on the foundation of the feminist Standpoint theory-the notion that the social phenomenon of inequality is socially, historically and culturally situated and that its investigation and analysis must be located in the context of the location of the social phenomenon itself (sees studies by Intemann, 2010 and Mamo, 2005). On that basis, the Fair Share Equity Framework does not simply offer a perspective; it provides a methodology, which simplifies investigation of the social phenomenon. It offers several new concepts on the

discourse of equity as a third dimension of educational distribution. The methodology provides new insights in the measurement of inequality in higher education. It makes the case for an equity-based system for the distribution of quality education, which takes 'Fair Share' into account as a primary consideration-with students eligible for admission being those who are qualified from schools located within each district and ranked in the top categories of performance across the district. It relates to studies that look at the conundrum of educational inequality from a socially a critical perspective (see studies by Raffo., Dyson., Gunter., Hall., Jones and Kalambouka, 2007). This approach attributes the social phenomenon to gaps in policy, systems and practices of distribution, and provides a lens that focuses investigation on policy elements, which may count for educational inequality and explain disparities between regions and districts of the country. It argues along with Post Colonial gender theorists (Oyewumi; 2003; 2005; 2011) that equity and equality should not be defined from the perspective of gender alone. Geography and demography should be taken into account and, that in the post-colonial era, equity and equality cannot be achieved based on the issues of women or groups who are relatively well off without the inclusion of the realities of those who are historically, socially and culturally disadvantaged. These perspectives informed the development of the concepts of Fair Share, Fair Share Index, Equity gap, Equity distance and equity distance index, as well as their application in the Fair Share Equity Framework of analysis, to respond to all five objectives of the study in ways not previously reported.

The entire theoretical and empirical foundation of the framework is located in Mamo's (2005) and Intiman's (2010) conceptualisations of the feminist Standpoint theory-particularly the concepts of social location, social position and epistemic advantage. This inspired the researcher to conceive and bring to light, the discourse of 'Fair Share' and fair share index to constitute a 'Fair Share' system or framework for higher educational distribution; on the strong belief that equity in participation in Higher education is a social good for all populations groups and is the cornerstone for national development. The framework defines equity as 'Fair share' and recommends that in order to achieve equity in higher education, participation should be determined on the basis of 'Fair Share' formula.

The study defines equity as 'Fair share'; constitutes the Fair share index system, and pioneers the

concept of equity index of education as a measure of inequality to incorporate equity as a third dimension of educational distribution. It classifies 112 districts of Uganda in three equity categories and identifies areas of the country where equity gaps in public university education are most concentrated. Based on the Fair share index system, the study uses the framework to illustrate how gaps in policies, systems and practices responsible for the distribution of education may perpetuate inequality. Its theoretical concepts and empirical findings offer a rigorous perspective in the understanding of the conundrum of educational inequality in higher education based on the notion that; no one that meets the first criteria, must be denied a place in the institution of their choice just because he or she comes from a disadvantaged background (Barr, 2004 p.266). This draws attention to how policies, systems and practices responsible for the distribution of public university educational opportunities produced, reproduced, naturalised and legitimised higher educational inequality over the years. For this reason, it requires population quota to be taken into account as a primary consideration for the distribution of educational opportunities in regions and districts. It is concerned with the role of public policy in ensuring equity and equality in access to public university education, in a country like Uganda where the number of places available is limited. It demonstrates what constitutes a 'fair system' and how inequality in public university educational distribution can be addressed. It shows how equity can be achieved-with students eligible for admission under the national merit system being those qualified from schools located within each district and ranked in the top categories of performance across the district.

The application of the framework requires schools and universities to rely on eligibility standards that reward the talent and hard work of the vast majority of students who qualify from disadvantage schools located in remote regions and district of the country. It focuses attention on both privilege and disadvantaged groups (Salmi and Bassett (2014p. 365) to ensure that all members of society who meet the minimum level of qualification can participate in higher education (McCowan, 2007, p. 582). It offers a moral discourse of national merit that reflects the notion of democratization of access to education, as embedded in Uganda's national legislative and policy framework and contributes to national development in general.

The framework provides a comprehensive set of tools that advances the application of the

feminist Standpoint theory of social location and social position (see Mamo, 2005) in the study of inequality in education. It accounts for the degree to which the distribution system of public university education is fair and reasonably equitable. Its Equity indexing system provides an equity classification approach that clearly brings gaps in the public policy to light; demonstrates how existing gaps manifest and reveals how levels of relative ease or difficulty of access may vary from one region or district of the country to another. This focuses the attention of policy makers and implementers on how policy interventions may function in ways that naturalise, produce, reproduce and legitimise inequality. It provides analysts and policy makers with a tool to identify when policies work and when they do not, and why. It contributes to the understanding of the complexity of the phenomenon of inequality-including its multiple and conflicting dimensions and how this may complicate the policy processes, from the perspectives of groups who may be in privileged and those in insubordinate positions. The approach advances the understanding of how groups may be socially located or positioned and what physical markers should serve as a basis of their treatment with regard to policy interventions that are meant to address the root causes of marginalization and tackle the social phenomenon of inequality (Mohanty & Alexander cited in Stone-Mediatore, 2007: 66). This facilitates analysts, policy makers and implementers to recognise the structural causes of inequalities at the root of the design, implementation, monitoring and evaluation of the individual policy parts; avoid the tendency for policy homogenisation and generalisation; and focus on the processes by which inequalities are perpetuated in everyday life. In this context, the framework offers a fresh “alternative vision of scientific truth and method” to feminists Standpoint empiricism, in comparison to the input and output epistemologies of the distribution of education, thus providing legitimacy to knowledge created. It stands out for its emerging perspectives on equity; explores new discourses and provides a theoretical framework that deconstructs the conundrum in ways not previously reported.

The idea of an equity-based system is not new. In the US, the New York City High School Match system applies a similar philosophy. For instance, the EdOpt Schools are required to reserve 50 per cent of their seats as quotas for top, middle, and bottom categories of performers respectively (Abdulkadiroglu et al. 2005; Abdulkadiroglu and Sonmez, 2003; Abdulkadiroglu, 2010). In China, quotas are set by universities to promote minority student intake (Niu & Wan,

2018). In Israel, structural disadvantages, such as students' socioeconomic status and high school, are taken into account when admitting students in the four most selective universities in the country (Alon, 2011). In Finland, quota systems exist for certain university education programmes. In France, students from schools in poor neighborhoods benefit from special policies in certain institutions. In Nigeria, a ratio 25 per cent is reserved for less developed areas (Obielumani, 2008; Ogbonnaya, 2009). What is new in this study is its innovative approach—the idea of fair share and the incorporation of an 'equity dimension' in educational distribution systems. This provides opportunities for equity to become an essential part of every country's development strategy; address growing levels of inequalities in primary, secondary and tertiary education systems and tackle the challenges of lack of capacity for longer-term planning and tax-based models of financing for educational infrastructure (Oketch, 2016).

The framework takes into account the link between higher education and development (McCowan, 2016a), the significance of equity and equality in the distribution of higher education (McCowan, 2016b) as a resource; the recognition of the role of higher education in a globalised economy (McCowan, 2012) and the concern that expansion without the consideration for equity (McCowan, 2007) undermines the impact of higher education on welfare (McMahon & Oketch, 2013) and limits the greater good that comes with social benefits that higher education renders in the emancipation of society as whole (McCowan, 2007). The Fair share approach recognizes that the long-term benefit of education to welfare and development is not a factor of the level of educational attainment of an individual alone, but a function of how equitably quality education including primary, secondary and university educational opportunities is distributed across the entire country's population. It classifies districts based on Equity Index. It therefore disregards the use of race, caste, ethnicity, gender, religion, etc which has been used too often, to grant special preferences to disadvantaged groups to address historical injustices and promote social justice (Bagde, Epple & Taylor, 2016; Bertrand, Hanna & Mullainathan, 2010; Jayal, 2015; Deshpande & Zacharias, 2013). It offers a perspective, which defines equity as a third dimension of educational distribution and constitutes a methodology that provides a new window into the social phenomenon of inequality in higher education. It makes the case for an equity-based system for the distribution of quality education, which takes 'Fair Share' into account as a primary consideration.

There are studies, which may suggest that an approach, which emphasises the concept of equity, can be counterproductive; that emphasis on equity may reduce the importance of success and hard work, as it tends to imply that people should be rewarded on the basis of the group to which they belong rather than their ability (Ekundayo and Ajayi, 2009). For that reason, Affirmative Action, an example of one such policy, is often labeled as reverse discrimination (Sander, 2004). To the contrary, the fair share indexing system does not seek to reward mediocrity. It seeks to reward the best talents equally given that there is no correlation between talent and location. It thrives on individual success and hard work, as its intention is to reward merit on the basis of people's ability in all locations of the country other than rewarding the most privilege groups, at the expense of the disadvantaged. The framework was build with propensity to rise above its critiques by drawing attention to the vast majority of students who qualify from disadvantage schools located in remote areas, without regard to their race, caste, ethnicity, gender, religion. It aims to align policy with practice and strengthen the vision for long-term planning and financing for equitable educational distribution.

### **10.3 Summary of results in the context of feminist Standpoint empiricism**

The study found that location matters. It proved that it is "*one's social location that affords him or her multifaceted access to social phenomenon*" (Mamo, 2005: 358). The study found that:

- 90.5 per cent of the total student population came from the top 20 per cent of districts Uganda
- only 0.2 per cent of the student population was distributed to the bottom 40 per cent of districts of the country;
- out of 101 504 students who were admitted from 1 178 secondary schools, nine out of every ten qualified from high schools located in 20 out of 112 districts and five out of every ten from the two districts of Kampala and Wakiso located in the central region of Uganda.

The above findings validate the meaning, role, function and application of the feminist Standpoint theory of social location in the understanding of the social phenomenon on inequality in higher education. As a result of location, the Central region of Uganda, which accounted for

40 per cent of the top 20 districts, had the highest proportion of the student population of 36 per cent by region of origin. The Western region, with 35 per cent of the top 20 districts, had a share of 31 per cent of students who originated from districts within the region. Twenty-five per cent of the top 20 districts and 22 per cent of the student population by district of origin were in the east. Only 10 per cent of the student population originated from the districts in Northern Uganda. There was no single district in the Northern region among the top 20, implying that the majority of the student population in Northern Uganda qualified from high schools located outside their region. Ten per cent of the student population in the country had home districts located in the northern region.

Based on the Fair Share Index calculated for districts of Uganda, 86 districts (out of 112) accounted for 4 737 missed/lost public university educational opportunities every year. The majority, 70.6%, of these losses were incurred in 33 districts (representing 30% of districts), of which 12% were districts in Western Uganda, 24% in the eastern and western regions respectively and 39% in Northern Uganda. In equity terms, this implies that districts that are structurally disadvantaged remain poor and individual as well as community productivity and the ability to rise above poverty stagnate. It impedes the trickle-down effect of higher education in enhancing the country's ability to fight poverty.

The above results have clearly showed that location afforded “*multifaceted access*” to higher education to students depending on their districts of origin and district of high school location (Mamo, 2005: 358). By location, only nine (9) per cent of the student population qualified from 94 districts, representing 82% of the districts of Uganda. The top eight districts in Central Uganda accounted for 71 per cent, the west 12 and the east eight per cent of the beneficiary student population of 93 231. Of the eight districts with the best ease of access, seven were in the central region. Only two (out of 31) districts in Northern Uganda, ranked among the leading 30 districts nationally. This shows that location remains a main factor in Uganda's public university educational inequality. This was in the context of the distribution policies, systems and practices that largely favoured and rewarded students from the best high schools located in the top districts of the country. Depending on one's district of origin and or district of high school, location placed epistemic agents in two different social positions. This was in the context of the national

merit and Affirmative Action systems of distribution. These positions were one of privilege on one hand and one of insubordination on another. This produced, reproduced, naturalised and legitimised public university educational inequality. Based on the 'equity distance index' analysis of districts to public university education, the study found that the level of relative ease or difficulty of access to public university educational opportunities varied from one region and district of the country to another. It found that the public university educational distribution system was driven by a few top districts of the country. This perpetuated a system that produced winners and losers as demonstrated in the 'equity distance index' analysis; and in the classification analysis in chapter five, in which districts were clustered into three equity categories and areas of the country for which the distribution system was most effective or harmful identified; as well the specifications of 'locations' where public university educational gaps are most concentrated. The analysis which drew attention to those districts in privileged and those in subordinate positions, confirmed what Mamo, (2005) demonstrated in their study as far as the application of feminist Standpoint theory is concerned (Mamo, 2005). This result also confirms what Jayadev & Reddy (2011) found out. In a study on how differential inequality is formed, Jayadev & Reddy attributed differential inequality to inter-group differences in access to resources. The study proves the relevance of the feminist Standpoint empiricist's notion that social location systematically shapes and limits knowledge production and access to resources from particular Standpoints (Intemann, 2010: 783), especially in the absence of social equilibrium or equity measures. This demonstrates why equity based policies that take location into account do matter. It is proof of the significance of the feminist Standpoint empiricist's theory- the reality of notion that social location provides epistemic advantage that is specific to the location of epistemic agents (Intemann, 2010).

### **The High school factor:**

Uganda's public university educational distribution system relied, systematically on a narrow pipeline of high schools located in 3 out of 112 districts to fill its undergraduate programmes.

- 7 out of every 10 students selected for undergraduate programmes were from 3 districts;
- Up to 82 per cent of the student population qualified from schools located in five districts;

- A single private school accounted for as many students as what a total of 733 public schools accounted for;
- Of the top 100 high schools, 80 per cent were located in one of the four regions;

The influence of location led to significant levels of regional disparities in the distribution of higher educational opportunities, with 91 out of every 100 students found to have qualified from high schools located in 20 out of 112 districts and 9 out of every 10 public university students selected from Northern Uganda qualified from high schools located outside the region. Nine out of every ten students from Northern Uganda qualified from high schools located outside the region. The study confirmed Mamo's conceptualisation of the theory of social location. It shows that students were afforded "*multifaceted access to social phenomenon*" depending on their high school (Mamo, 2005: 358). A clear link was demonstrated between the concept of social position or one's high school and the relative level of ease or difficulty of access to public university educational opportunities in Uganda. This implies that the conundrum of equity and equality in public university education in Uganda was no longer a matter of just increasing numbers. Access and participation has become more of a factor of location-the privilege, which comes with one's high school other than merit. This confirms the significance of the feminist Standpoint empiricist's notion that knowledge production and access to resources such as public university education may vary depending on the extent of epistemic advantage rendered to epistemic agents in specific locations (Intemann, 2010). Moreover, this notion of epistemic advantage or privilege turned out true in as far as access to public university educational opportunities in regions and districts of Uganda depended on being in the right location.

### **Gender and Affirmative Action**

Up to 49.5 per cent of students were female and 50.5 per cent male. Although this figure may imply a relatively sound gender balance, it was far from reality particularly at district, college and subject levels;

- Half of the population of women in public university education was in one out of ten colleges;

- Eight of out of every ten women were in two colleges;
- In the rest of eight public university colleges, men outnumbered women by a ratio of 8:2; and
- At regional level, Central Uganda enrolled slightly more women than men
- The Western region of Uganda enrolled slightly more men than women;
- The Northern and the Eastern regions enrolled larger numbers of male than female students.

Although Affirmative Action opened doors for more women in higher education, the doors it opened were not necessarily for historically disadvantaged and excluded women:

- the programme worked best in the top high schools due to its tendency to benefit primarily the most fortunate women, often to the detriment of the least fortunate in poor and remote districts;
- It failed to reach the most marginalised women on grounds that it was implemented for competitive reasons. This led to unintended consequences;
- The marginalisation of women from underprivileged schools in poor and remote districts; and;
- The exacerbation of district and regional-level gender inequity in the distribution of public university educational opportunities.

The representation of women tended to be lower in fields where jobs have considerable national appeal but it was higher in fields where status and potential for future income, power and access to resources are considerably lower within the historical social and cultural context of Uganda. This was largely a result of the access criteria, which mainly favoured students from the top districts and high schools in the country; considerable barriers faced by women, particularly in science education and the lack of effective policies to address college based inequalities related to female intake, and the transition from high school to higher levels of education. The career divide demonstrated in the study signals a much deeper crisis – the degree to which admission practices may structurally deter the equity, equality and empowerment agenda. This raises questions on how public university colleges are equipped to deal with modern patriarchal

policies, systems, practices and structures that influence gender dynamics in the career fields critical to economic growth and development of the country (Huq, Huque & Banik, 2017).

Once again, the above results confirmed the relevance of the Standpoint theory to the significance of the high school factor. The beneficiaries of the Affirmative Action programme were afforded “*multifaceted access to social phenomenon*” (Mamo, 2005: 358) depending on their high school. The study reveals the importance of the counterfactual effect of the high school factor on the effectiveness of the Affirmative Action programme; in the context that the policy was implemented for competitive reason, other than for reasons of equity and equality. As a result, the counterfactual effect of the high school factor turned out to be too profound for the 1.5 bonus intervention points of the Affirmative Action to be effective. This confirms the significance of the feminist Standpoint empiricist concept of social position and epistemic advantage in the understanding of the efficacy of the effectiveness of social policies and programmes such as Affirmative Action. Moreover, the notion of epistemic advantage or privilege that is theorised as specific to a high school, offers new and fresh perspectives for the future design, development and implementation of policies such as Affirmative Action.

#### **10.4 Summary of discussions**

The study confirms what others have found. In a 1995 study, Sibley investigated the link between the locations where children lived and where children went to school; and found that location was a major factor in shaping and limiting educational access, outcomes and opportunities. Children living in disadvantaged locations had limited educational access, opportunities and outcomes, simply because of where they came from (Sibley, 1995). Similarly, Bauder (2002) also found that schools located in better-resourced neighbourhoods were out of bounce for the majority of children who came from poor neighbourhoods. This was the case in Uganda. The implication was clearly evident in the composition of the student population in public universities, in which 90.5 per cent of the student population came from the top 20 per cent of districts; half of the female population were in one college; while 8 out of every 10 in two out of 10 colleges. Two regions of the country accounted for two-thirds of the entire student population. There was a clear link between districts where the best secondary schools of admission were located and levels of relative ease of access to public university educational

opportunities. This led to a distribution system, which largely excluded students from disadvantaged areas of the country; reinforcing regional educational disparities and polarization and perpetuating educational inequality. This was the case, given the logistical difficulties—the lack of resources to hire and retain qualified and experienced teachers and provides the books and the technologies required to uplift the quality of learning in rural areas.

*The main problem lies in the disparities between regions. There is a big gap between the central region and the rest of the country; in terms of poverty levels, educational access, attainment and opportunities; as well as in the transition rates of girls and boys from primary to secondary and to higher levels of education” (Clever, from interviews). “That is true.... Although access to primary education is relatively equal across the country, inequality in the distribution of secondary education accounts for regional disparities in higher education (John, from interviews).*

The distribution pattern of public university educational opportunities was related to poverty trends. It was also related to enrolment trends in secondary education by regions of the country. For example, as a World Bank’s (2009b) study showed, the average level of education in the Central urban region was nearly three years higher than the Northern urban areas and twice that of the rural North (World Bank, 2009a). Among the 15-year-old urban dwellers, the average number of years of education (8.2) was 78 percent higher than the average years of schooling of 4.6 year in rural areas. Only 11 percent of people aged 15 and above outside the Central region had completed secondary education compared to 29 percent in the Central region. The Central region also had the lowest proportion of people who have not complete primary education (39 per cent), while the North had the highest proportion (67 percent). These gaps, as captured in FGDs and interviews are important; because educational access, attainment and opportunities determines regional disparities in poverty rates, unemployment, higher education and inequality, (see World Bank, 2009a;2009b).

In a study Escobal, Javier and Torero (2005) regional disparities were often associated to regional differentials in human capital investments and under investment in public infrastructure. This resulted into higher returns in education in those areas. The richer locations also provide higher returns in education for its residents and those who can afford it. Higher public

investments in such areas also attract greater private investment in education and other social sectors, creating better opportunities in the process, with much higher levels of access to public infrastructure, opportunities and greater returns for investments (World Bank 2006a, 2006b; 2009a; 2009b). This intersectionality shows that equity in education is the best strategy to foster development. (Cagnin, Loveridge & Saritas, 2011). It reveals the danger of schooling gaps that are based on regions where one comes from. This is how preconditions that transmit the legacy of poverty from one generation to the next are constituted, if left unchecked. Measures that diversify intake from disadvantaged districts of the country are needed, to narrow the socio-economic divide in access to quality primary, secondary and higher education as a social justice issue. This calls for a stronger role of the state. Part of this role is to ensure, that institutions of learning-both public and private remain diverse in all fields of study, regardless of levels of income or wealth distribution in the country, to ensure equity in the distribution of the benefits of quality education in all regions and districts of the country.

### **The high school factor:**

The high school factor has become a major conundrum in the understanding of the social phenomenon of educational inequality in Uganda. Eight out of every 10 students selected for undergraduate programmes were from high schools located in five out of 112 districts. Of the top 100 high schools, 80 per cent were located in one of the four regions of the country. Thus regional disparity in the distribution of education has become a major factor in Uganda's educational inequality. These findings leads to questions on how the role of policies, systems and practices such as the national merit in producing, reproducing, naturalising and legitimising differential inequality in the distribution of education. Contrary to what was anticipated, it appears that the district quota system of 2004 was too insignificant to make the national merit system more rewarding to high performers who write their national exams in remote districts of the country. Even through the quota system was introduced from 2005, it was evidently clear, that the distribution system continued to rely on a limited base of the student population. This was reflected in narrow secondary school base, which accounted for the rising geographical and demographic forms of inequality observed in the higher educational distribution system. Moreover, districts in which the public university education gaps were most concentrated were

those that have been historically disadvantaged for far too long. This undermines the benefits of higher education in promoting equity and equality in all sectors of the economy, particularly in access to jobs, power and resources across regions and districts of the country.

The study found that the vast majority admitted, were from the top echelons of the high school system. This was not because the top high schools themselves created the problem; but the policies, systems and practices responsible for the distribution of educational outcomes and opportunities throughout the country. The findings and conclusion of the study confirms what others have established. Studies by socially critical theorists have found that, educational inequality is not shaped and determined by one's social background, i.e. family, school or neighborhoods characteristics; but at institutional and systems level-in other words, by processes of economic globalisation and policies, systems and practices that perpetuate (Muijs *et al.* 2004; Kalmijn and Kraaykamp, 1996 and Carter, 2003). For this reason, education is viewed as a classed phenomenon. As a 'classed' phenomenon (Maguire, 2006), socially critical studies have established that access to education is hierarchically and competitively stratified to produce winners and losers (Gewirtz, 2001). This stratification process is what gives meaning to the concept of the high school phenomenon and the role, which it plays in the stratification of educational access, attainment and opportunities. For this reason, socially critical studies have found that educational policies and systems are integral to national economic planning. In their view, educational inequality exists because the role of education in society is not about equality and social justice, but economic competitiveness. It is about ensuring that the state produces the working class and skills required to attract global capital and compete in the global economy (Lipman, 2004; Morrow and Torres, 2000). It is this globalist capitalist ideology that propels the processes of economic globalisation that result into educational polarization (Byrne, 2005), which isolates poor communities from all aspects of quality public life, including primary, secondary and higher education system.

The rise of the conundrum of the high school is associated with the constraints faced in the provision of quality primary and secondary education (Zhang *et al.*, 2014). This was evident in the finding of the study, which showed that while 50.1% qualified from schools located in two districts of Kampala and Wakiso; the proportion of students who qualified from a single high

school matched those who did so from 733 secondary schools. Of the 20 top districts of location for the top high schools, 40 per cent were in the central region, 35 in the west, and 25 in the east and none in Northern Uganda. The high school factor was the reason why the distribution system did not work for students from underprivileged locations and districts of Uganda. This was in spite of the introduction of a district quota-based policy for public university educational distribution in 2005.

Again, the above finding confirms other studies, which show that educational inequality, vary from context to context, depending on geography (see studies by Raffo., Dyson., Gunter., Hall., Jones and Kalambouka, 2007; Intemann, 2010 and Mamo, 2005). In evaluating national educational attainment data from over 40 countries, Banerjee (2015, 2016) used a functionalist approach to show how geographical forms of exclusion in education are socially, historically and culturally situated. The study found that students from disadvantaged areas were most likely to be excluded from the top echelons of the schooling system, and more so from science education, in particular, technology, engineering and mathematics (STEM). Similarly, Banerjee concluded that this was not the result of the school attended, but the circumstances in which the school and communities find themselves. Likewise, in the United States (USA), Reardon (2011) and Steele (2010) found that more urban students completed high schools than rural students; in a study by Welch (2014), as the intensity of poverty increased from urban to rural locations, levels of educational attainment decreased significantly. Similarly, in a cross-national study involving more than 40 countries, family and neighborhoods characteristics such as parental level of education and family demographics were found to have profound impact on educational outcomes and achievements (Nonoyama, 2005). This affected students from rural and urban locations differently. In a similar study on reasons for poor performance in disadvantaged communities in South Africa, Mokgaetsi (2009), found that location accounted for poor learning outcomes in subjects such as mathematics and science, with lower results expected for girls than boys did. In a study involving eight African countries, Mullis *et al* (2007) cited low parental education in poor neighborhoods. Similarly, Greenman, Bodovski & Reed (2011) reported that low parental education was a common problem in disadvantaged communities. The effect of parental education related to the levels of academic and occupational achievement of children in a 2013 study conducted in the USA (Westerlund, et al 2013). Children whose mothers had no

high school education performed poorer, compared to those whose mothers had tertiary education. This was in spite of their belonging to the same socio-economic groups (Ayoub et al., 2009). Low parental education rendered parents incapable of giving their children the necessary educational support to perform well at school. The result is a vicious cycle of cause and effect, which condemns children from disadvantaged locations to a lower quality education, with less opportunity to proceed to higher education. This makes poverty self-perpetuating (Oyewumi, 2003; 2005 and 2011) and social mobility practically impossible as those born in poor environments are condemned to remain poor (Vinod, Yan & Fan, 2001; Dwokin, 1981). For this reason, the study agrees with the view that inequality in education is insolvable without the underlying ideology or policies, systems and practice responsible being addressed (Raffo *et al.*, 2007). The fair Share equity framework was developed to define what constitutes a fair system, to address the challenges of limited availability of space for higher and which has meant that the distribution system renders the vast majority of students who qualified from disadvantage schools located in remote areas less equal. To address this gap, the 'equity indexing' system was developed to incorporate 'equity' as a third dimension of higher educational distribution.

Crowder and South (2003) showed that the school's social context limited educational access, outcomes and opportunities available to students. The same was found to be the case in a study by Hallinger and Murphy (1986); where higher levels of concentration of social disadvantage among students; was found to have profound negative impact on educational access, outcomes and opportunities in disadvantaged areas. The disadvantage of the school tended to get worse over time, with significant difficulties reported in teachers' recruitment, retention and behavior (Lupton, 2005; Thrupp, 1999). It was not the schools themselves which created the problem but the social context in which those schools found themselves (Acheson, 1998; Exworthy *et al.*, 2003; Meen *et al.* 2005) In the United States of America (USA), the more rural a school was, the poorer the performance and the higher the levels of educational inequality (Johnson-Brown, 2014; Greenman, Bodovski, & Reed, 2011; Reardon, 2011; Steele, 2010; Welch, 2014). In a 2002 study, Handa showed similar results in rural Mozambique. The result of this study are aligned with those that have identified the need to diversify intake (McCowan, 2015), promote access to higher education as a social justice issue (HEFCE, 2014) and narrow the socio-economic divide in education (Langdon, McKittrick, Beede, Khan, & Doms, 2011).

In the context above, existing policies, systems and practices need to be updated to recognise the current circumstances and challenges of the time. This would require a process of national consensus building over what would constitute a fair system, particularly in the contexts, where the levers of access to higher education have shifted to just a few top high schools in the country. Then there is the need for the country to construct a moral discourse of merit, which recognises the notion of equity in the current context. To avoid further risk of educational marginalisation and inequality (Dias, 2015), the high school factor needs to be given much greater attention in the policies, systems and practices of distribution. A bottom up approach, which recognises and rewards merit and hard work, is needed. This can be achieved if the best candidates for admission were to be those with the highest academic weight obtained from schools located within each district.

### **Gender in Uganda's Public University Educational Distribution**

Gender is a main factor in Uganda's public university educational inequality. The study found that half the population of women was enrolled in one out of ten colleges; eight out of every ten were in two colleges. In eight other colleges, men outnumbered women by a ratio of 8:2. The representation of women appeared to be lower in fields where jobs have considerable national. This was due to the barriers related to intake to sciences and the transition of girls from lower to higher levels of education. The study draws attention to gender and subject based inequalities in higher education as a growing development crisis. This is in sharp contrast to global trends. By 2012, female enrolment in higher education had doubled that of 1970 (Marginson, Schoole & Knight, 2013; 2016a; 2016c; 2014; McCowan, 2007). According to studies that have focused on gender inequality in higher education, women account for a majority of tertiary education students in most countries especially in Europe, the United States (Buchmann and DiPrete, 2006), and Japan (Edwards and Pasquale, 2003). Contrary to the above trend, the study found more men than women in all public university colleges in Uganda, except one – the College of Humanities and Social Sciences. One out of every two public university students, one was from the College of Humanities and Social Sciences.

When district and college level aggregates were analysis, major subject based gender disparities

were revealed. While gender parity appears to have improved overall, progress was concentrated in a few fields of study and districts of the country. Women were under represented in 74 (63%) out of 112 districts. The relative position of women in public university education in Uganda was poor in most districts, with the majority of women who lagged behind originating from remote and disadvantaged districts. The central region of Uganda achieved gender parity overall, due in large part to the fact that the implementation of the 1.5 bonus intervention points of the Affirmative Action programme mainly benefitted women from more competitive high schools in the country.

The study confirmed what other studies show; that the benefit of higher education is not applied to male and female equally (Menon, Terkla & Gibbs, 2014; Katsuki, 2018). This was largely due to considerable barriers women faced, particularly in science education in general and the lack of effective policies to address college based inequalities related to female intake, and the transition from high school to higher levels of education. Since women and girls seeking to become scientists, technologists, engineers and mathematicians need to take science-based subjects in secondary school, it is not surprising that under representation of women was associated with low numbers of women meeting the selection criteria for admission to public university colleges. The irony is that, for the few who qualified, the representation of women tended to be higher in the fields of study where status and potential for future income, power and access to resources are considerably lower. Males tended to dominate the fields that were far more lucrative, relatively employable and well paid. The gendered picture produced in this study is largely not new. What is significant is the conclusion drawn from the findings of the study; the emphasis on systemic barriers, particularly in science education, which women in Uganda continue to face, due to the lack of effective policies and systems. A case is made for change in policy instrument to address college and subject-based gender inequalities, including those related to intake and the transition of girls and women from high school to higher levels of education.

Studies have shown that female's participation in higher education went from a minority in 1970 to a majority in 2012 in all regions of the world, except Africa (World Bank 2009; Schofer & Meyer, 2005; Katsuki, 2018). Several factors have been found to account for this. In a study on

how family demographics affected women in higher education, researchers found that parental education counts; the higher the parental level of education, the greater the chances were for girls in higher education (Goldin., Katz and Kuziemko, 2006; Dryler, 1998; Buchmann and DiPrete, 2006; Edwards and Pasquale, 2003). This was the case in Europe, the United States (Buchmann and DiPrete, 2006), and Japan (Edwards and Pasquale, 2003), until the 70s. According to Ono (2004), traditionally girls were favoured in higher education if they had fewer or no brothers at all. Family demographic had far greater negative effects for girls' education than boys (Grob and Wolter, 2007) did. Consequently, the larger was the family size, the fewer the chances were for women in education (Goldin, 2004; Goldin and Katz; 2002; Goldstein Kenney, 2001). This is still the case in Uganda. From 1960s, a number of policy reforms in industrialised countries, led to more doors being opened for greater participation of women in higher education (Ono, 2004). This included the introduction of oral contraception in the United States (USA) in the 60s (Goldin and Katz, 2002) and the elimination of legal or tacit forms of discrimination that forced women to give up their education and jobs, especially when they got pregnant or married (Goldin, Katz and Kuziemko, 2006).

Even when women joined higher education in numbers, studies found that they were most disadvantaged in science education (Le Doeuff, 2003). This is still the case in Uganda, where women lagged behind in eight public university colleges, and where men outnumbered women by a ratio of 8:2 in most science based fields of study. This explains why most recent studies and debates on gender inequality in higher education have focused on topics such as faculty demography (Bettinger and Long, 2005), gender differences in subjects and pay (Blau, and Kahn, 2000) and gender income gap (Bobbitt-Zeher 2007), considered to be areas where women significantly lag behind (Eurydice, 2007).

The trajectory by which boys and girls, progress through school is, vital in achieving gender equality in higher education. For this reason, greater emphasis is needed on the policies, systems and structures that account for inequality in the distribution of educational access, outcomes and opportunities. Once boys and girls are enrolled in primary school, focus must shift to the policies, systems and practices that enhance their survival to the last grade of primary and secondary school respectively. Without this balance, equity and gender equality cannot be

achieved from the higher end of the education system.

### **Affirmative Action**

Without the bonus intervention points of the Affirmative Action programme, there would have been 33 districts (29.7 per cent of all districts) that would not have had a single woman admitted on a government-sponsored programme in which they were during the 2015/2016 academic year. This confirms the finding of a study by Dubrow (2006), which indicated that the programme contributed directly to district development in Romania. The benefits of the 1.5 bonus intervention points of the Affirmative Action programme were clearly visible. In 2015, 310 women would not have been selected for various academic programmes, had it not been for the inroads made by the 1.5 bonus intervention points of the Affirmative Action programme. This confirms what others have found. Owing to Affirmative Action policies, systems and practices, studies have shown that the female population at universities in the US rose from 28% to 42% between 1972 and 1993 (Leonard, 1990; Lott & Ramseyer, 2011). This was confirmed to be the case in Uganda, where women's representation in public university education has increased exponentially. Although we did not confirm the percentage of women whose access to the public university education in Uganda was, in fact a matter of Affirmative Action, we found that, 66 per cent of women who were admitted in different fields of study on government sponsorship in 2015 would not have been in those places without the intervention of 1.5 bonus points of the Affirmative Action programme. The study confirmed Leonard (1990) and Lott & Ramseyer (2011) who found that there were women whose careers would not be the same, if it was not for the benefits of Affirmative Action; and Estevan, Gall and Morin (2018) who found that there was a good number of students who would not have had access to public university education without the programme. Unlike Estevan, Gall and Morin who found that the majority of the beneficiaries in their study were from public schools, the majority of the beneficiaries of Affirmative Action in Uganda were from the top high schools in the country, most of which were private. This led to the conclusion that Uganda's Affirmative Action programme was most effective in the two districts of Wakiso and Kampala (two out of 112 districts), where it made the biggest difference, accounting for 30.7 per cent of the total number of beneficiaries. It did not work in 40 districts (36 per cent) where there was no single beneficiary of the programme in the 2015/2016 class.

While Kampala and Wakiso districts accounted for 50.1 per cent of the total student population that was admitted and 68 per cent of the total student population by district of origin, the two districts also accounted for 30.7 per cent of the beneficiaries of the Affirmative Action programme. This means that, for every 10 beneficiaries of the programme, almost four were from the two districts of Kampala and Wakiso. The base of the beneficiaries of the programme was limited to a specific category of women, from specific districts and to a few top secondary schools in the country, where it made the biggest difference. Forty per cent of all 2015 beneficiaries were in the central region of Uganda, 26 per cent in the west, 25.6 per cent in the east and 8.4 per cent in the north.

The benefit of the 1.5 bonus intervention points was confounded by access to the top high schools in the country. The majority of the women who benefitted did so in large part by the virtue of their prior access to a top high school. It appeared that the high school factor became the prequalification for individual merit and subsequently that of being a beneficiary of the programme. This confirms what other studies have shown; that cultural, social and historical contexts impact on the efficacy of policies such as Affirmative Action and this may shape as well as constrain access to opportunities (Smeyers, Bridges, Burbules & Griffiths, 2015).

The 1.5 bonus intervention programme therefore missed the target of reaching the hard to reach – the excluded and the marginalised – and hence benefitted women who were relatively better off. Out of every 10 beneficiaries of the programme, four were from the two districts of Wakiso and Kampala. This conclusion confirms the findings, which showed that Affirmative action can benefit those who do not need it; to the extent that Uganda's Affirmative Action programme would be counterproductive, if it benefitted those for whom it is least needed. In his study, *Affirmative Action around the World: an Empirical Study*, Sowell found that affirmative action policies encouraged non-preferred groups to designate themselves as members of preferred groups to take advantage of group preference policies. This for this reason, the policy tended to benefit primarily the most fortunate among the preferred group (Sowell, T, 2004). 86 per cent of the beneficiaries of the programme were from the top 41 out of 112 districts. In the class of 2015/2016, two out of every 10 beneficiaries of the programme came from one single secondary school – Saint Mary's Secondary School Kitende, a private school located in the top urban

district of Wakiso. 19.5 per cent of the beneficiaries of 2015/2016 were from Saint Mary's Secondary School Kitende, 6.2 per cent from Uganda Marty's Secondary School Namungongo, 5.8 per cent from Mount Saint Mary's Namagunga, 5.5 per cent in Gayaza High School, 5.5 per cent in Nabisunsa Girls' School, 5, 2 per cent in King's College, Budo, among others.

The Affirmative Action programme benefitted students in a limited number of fields of studies. This finding confirmed the relevance of the notion of epistemic advantage or privilege theorized in the feminist Standpoint theory (Mamo, 2005; Mamo, 2010). Although the theory was proven to hold, we also note that the epistemic advantage rendered by the high school factor to access to public university education was limited to two out of 10 colleges. The policy limitation meant that Affirmative Action in its current form and shape is relevant but ineffectual in the key fields of study in which women continue to lag behind, particularly in science education. This is in the context where girls and women still make up less than 25 per cent of student population who take up science-based subjects in secondary and higher levels of education. Moreover, 75 per cent of the government of Uganda's sponsorship under the national merit system is dedicated to science-based programmes. This implies that the quality of the current bonus policy matters, just as much as the efficacy of its implementation and its significance in the context of gender, geography and subject based forms of inequality that pervades the current system. This proves the significance of the feminist Standpoint empiricist theory in the understanding of the complex nature of the social phenomenon of inequality in public university educational distribution systems; and the complexity of the issues that need to be addressed. It also reveals the need to for a gender based policy that goes beyond a 1.5 bonus points. Moreover, the notion of epistemic advantage or privilege that turned out true is not productive enough, given the extent of gender-based subject inequalities observed.

## **10.5 Summary of Conclusion and Recommendations**

Because historical injustices still exist, further efforts at inclusion is necessary (Zhang & Boyle 2014) to ensure the benefits of policies such as Affirmative Action and the national merit system go to those who most need it. This study introduced the 'Fair Share Index' as a measure of educational inequality. The 'Fair Share Equity Framework of analysis was developed and used to

incorporate 'equity' as a 'third' dimension of educational distribution. This was a new contribution to knowledge and an effort towards the goal of inclusion in higher education. Given the limitations on space and resource availability, the Fair Share Equity Framework places emphasis on ensuring that admission is based on a Fair Share formula, to address structural disadvantages in policies, systems and practices; with the best students for admission being those qualified from schools located within each district and ranked in the highest category of performance. This assumes that each district is entitled to a fixed number of seats, in the context of the current national merit system; and that this number is determined based on its Fair Share index, with strict preferences for the list of qualified applicants, for specific schools and fields of study. Therefore, the district Fair Share Index becomes the primary consideration for student allocation.

This calls for a national consensus to address the current circumstance and offer a moral discourse of merit, which recognises the notion of equity and defines what would constitute a fair system, in the context, where the levers of access to higher education have shifted to just a few top high schools in the country. Such consensus should reject as counterproductive; the notion that the use of equity based policy and system would cause unprepared applicants to be accepted in highly demanding fields of study and encourage mediocrity and incompetence. This is given the fact that public university colleges already admit privately sponsored students with lower academic grades. The recommendation for due consideration for the hard to reach, the most isolated and the most marginalised of the most qualified applicants – men and women from every district across the country – should not be viewed as lowering the bar and so denying those who strive for excellence a sense of real achievement. The concept of national merit should be seen in the context of increased polarisation in access, outcomes and opportunities in secondary and higher education in the country, to ensure all those who meet the first criterion from each district get a fair chance of accessing institutions of their choice.

This requires minimum mandatory requirements based on district fair share as a necessity, to boost intake from remote districts and underprivileged schools. Therefore, the key questions that need to be addressed include: (a) how to achieve equity while rewarding talents and boosting minority district student population in all public university colleges and fields of study; (b) how to ensure women are represented in an equal measure with men in all fields of study critical to

economic growth and development; (c) how to reward students from underprivileged schools and ensure that all districts receive their entitlement in line with the principle of 'Fair share'.

The above questions require a dimensional shift in distribution policy and system for both secondary and higher education. According to Tikly (2017), eliminating inequalities requires reaching the most marginalised (Tikly, 2017). In evaluating the eligibility of applicants, district quotas should become the primary consideration to ensure high schools and public universities are not simply selecting only the highest performers from a few top districts and high schools to populate their campuses. Admission to senior one (Grade 8), senior five (Grade 11) and public university fields of studies should not be assigned based on criteria that rely on individual privileges. This requires that quotas be assigned for all districts to achieve their minimum fair share in human capital investment allocation (Sabbagh, 2011). This goes for all top performing secondary schools and public university fields of study critical to economic growth and development. Because historical injustices still exist (Holzer, 2006), the bonus intervention policy should not only be offered for applicants from the top secondary schools that are often best placed to meet the benefit threshold. The most qualified applicants, both men and women from every district across the length and breadth of the country, should also be targeted, particularly in the fields of sciences. I am arguing that the concept of national merit should be redefined in context when assessing the eligibility of students in both secondary schools and colleges of public universities.

One option is to limit the current national merit system to 25 per cent of intake. The aim would be to redefine the system so as to target, attract and reward top-level talents, encourage innovation while balancing the goal of equity and equality at the same time. This would imply that 75 per cent of all publically sponsored opportunities be selected through a reformed National Merit System, the basis of which would be the district Fair Share, with at least 50 per cent female designation for all career fields critical to economic growth and development. Talented students who may be disadvantaged due to limited capacity and would not be accommodated within the top 25 per cent, would be expected to benefit from the national student loans scheme to pursue a career of their qualification. To strengthen gender integration, policy coherence and independence of the Affirmative Action programme, the 1.5 bonus intervention policy would be

targeted at both women and men in districts that do not realise their quota in specific fields of study. For this to work, long term plans and adequate tax-based models of educational financing will need to be developed, with a clear policy goal to ensure that at least 50 per cent of each every cohort of 19 year olds, are enrolled in some form of tertiary education by 2035.

This would guarantee education and training of a sufficient number of professionals from every district; in a manner that ensures availability of key skills needed for local and nationwide needs. An equity based approach *for* secondary schools and tertiary institutions and universities would bring a balance between supply (the policy of the best students in exams) and demand – the need to address inequality in the distribution of education. This would allow all districts of the country a fair share in the distribution of this very important national resource.

The proposed reform would regulate the distribution of quality secondary schooling at all levels, making secondary school, tertiary and university education systems more representative of the geographical and demographic features of Uganda. It would address the structural realities that hinder the potential of Uganda's education system to be a driver of development, particularly in the context of the role of higher education in the global knowledge economy (Menon et al., 2014). It would contribute to strengthening democratic norms and the human capital base needed for the country's entire economic development, informed citizenry, good governance, peace and security (Branković, Klemenčić, Lažetić & Zgaga, 2014). The risk of focusing on the relatively well off without confronting the realities of communities who bear the full weight of economic disadvantage and marginalisation would be avoided. Women and men from remote districts of the country would be brought into the mainstream of quality education and into the public university educational distribution system. This advances objectives such as equity, equality and diversity, particularly in the echelons of the most selective high schools and departments of public university colleges.

The dichotomy between the secondary school system and the public university educational distribution system demonstrates that equity in the distribution of quality secondary schooling matters for equity in public university education to be achieved. Neither one nor the other is less important. To tackle the growing challenge of educational inequality across districts, government must reclaim full control over the educational distribution system, irrespective of the number of

government sponsorships available for public university education each year. In any case, the Education Act 2008 gives full effect to education policy and services as a function of local and central government.

Given limitations on resource availability, the emphasis would be placed on addressing structural disadvantages, especially the geographical and demographic status of districts in access to education, to make institutions of learning and the echelons at the most selective departments much more diverse in their talent base than they otherwise would be. It would also allow the education system to yield broader diversity dividends without leaving any single district behind or to the detriment of any part of the country (Alon, 2011). Admission should not be assigned according individual privileges. In evaluating the eligibility of applicants, district quotas can become the primary consideration to address structural disadvantages. This would imply that higher education programmes would have quotas assigned for all districts to achieve their minimum fair share in human capital investment allocation, to guarantee education and training of a sufficient number of professionals from every district in a manner that ensures the availability of key skills needed for local and nationwide needs.

To overcome the vulnerabilities associated with the national merit system, a fair distribution system for quality education from primary to secondary level needs to be taken into account (Branković et al., 2014). Policy tools should be put in place to distribute the benefit of quality education to all districts equally, to ensure that secondary schools – especially private schools – are taking steps to include students from remote districts and underprivileged schools in their campuses to prevent their exclusion, overcome the injustices and inequalities of the past and promote social mobility for all. A district quota-based admission policy should be incorporated into the admission practices of the top secondary schools. This would include an appropriate mechanism to recognise and reward superior merit, without the academic stereotyping of students from urban districts as overachievers and the marginalisation of those from underprivileged schools and remote districts as underachievers. More prominent forms of social policy would expand the base of the student population in the public university system so that the best candidates for admission would be those with the highest academic weight from each district. This would acknowledge the role of individual district hardships and high school factors,

and recognise that schools, colleges and universities have the obligation to pursue scholarly excellence, on the one hand, and civic good, on the other, and that the objective of the educational distribution policy is to ensure balance in these purposes as a national objective.

A national merit system that emphasises either specific quotas or targeted goals is needed to address district imbalances in the student population and in particular fields of study to advance the mission of equity and equality in the country. This would require secondary schools and universities to ensure that high performers from all districts of the country and top performers from the top echelons of society are well represented in these institutions to promote a more inclusive and comprehensive educational distributional system. This requires steps to be taken to rectify a long period of inequality in the education distribution system that has tended to benefit primarily the better off and not those who most need it. To combat the structural challenges, the national merit system must be a means to enhance the potential long-term benefits of higher education in elevating the status of disadvantaged and marginalised districts.

To strengthen gender integration and policy coherence in the distribution policies and systems, only 25 per cent of students could be selected through a highly competitive National Merit system that is focused on encouraging the potential for innovation and targeting superior merit. The remaining 75 per cent of slots must be selected through a district population quota-based National Merit System, which takes into account the local quality of schooling, with at least 50 per cent female designation. Evidence shows that inequality in higher education is a result of inequality in the distribution of school resources and educational opportunities between regions and districts of the country (Klugman, 2012). According to Watts (2017), the distribution of wealth and income dictates access to higher education. Therefore, policies designed to increase students' access to financing promote equity in access to and the distribution of higher education (Watts, 2017). The complementary bonus intervention scheme must be in place, not only for women, but also for both men and women from remote districts who do not realise their quota in the 75 per cent and 25 per cent policies in all fields of study critical to economic growth and development. This would imply a change in the eligibility assessment criteria. Equally talented students who may not qualify for the top 25 per cent due to limited capacity, and could be disadvantaged by the 75 per cent district quota merit system, should benefit from the national

student loans scheme to pursue a career of their choice as privately sponsored students. This would be in congruence with the goal of Uganda Students' Higher Education Financing Policy 2012 (Tumuheki et al., 2016). It would provide access to higher education; support qualified students; and ensure regional balance in the distribution of higher educational opportunities, which are critical to national development. The bonus points of the Affirmative Action programme would not only be offered to the applicants from the top secondary schools who are often the most qualified, but also to the most qualified applicants from every district and gender across the country. Quota-based systems of public university educational distribution should not be viewed as "lowering the bar" and so denying the sense of achievement for those who strive for excellence. Instead, merit should be seen and defined within its context when admitting students in both secondary schools and public university colleges. Greater emphasis must be laid on bridging gender parity in public university colleges and in the key fields of study critical to economic growth and development. With men accounting for a ratio of 8:2 in eight out of 10 colleges, Uganda needs to align gender parity in public university colleges from a wider viewpoint of geography (all districts) and in all career fields critical to the economic growth and development of the country, to address one of the most blatant failures in its education system; the failure to tackle a major structural conundrum for development – the binary career divide between sexes in critical public university career fields. These do not only marginalise women but also the majority of districts in the country. For this reason, gender should be fully integrated into the national merit and district quota system. Mandatory minimum requirements for specific gender base quotas for each district and for each university programme are needed to boost current uptake of women in minority-oriented specialties, to integrate gender into the public university admission system in a manner that bridges regional and district gender gaps in public university education.

The Fair Share equity framework demonstrates that the historical, social and cultural context of one's location determines their social position and access to resources. This influences knowledge production and access to vital resources, such as public university educational opportunities in countries such as Uganda. In the context of this study, the theory of social location, social position and epistemic advantage was proven accurate, not simply as a perspective; but a reflection of a complete awareness and understanding of how district location,

population quota, high school, gender and Affirmative Action may place some epistemic agents in positions of privilege or disadvantage in the public university educational distribution system. This is how inequality is produced, reproduced, naturalised and legitimised in everyday life. Moreover, this is what the study was all about.

## **10.7 Recommendations for future research**

The widening secondary school gap between regions and districts of Uganda has long-term implications and policy consequences for equity in education. This cannot be overestimated. Further research would be needed to assess the full extent, meaning, function and implications of the high school phenomenon in districts and regions of the country. It would be vital to assess the variations and the changing configuration of this phenomenon from one district and region to another, and in all educational institutions-Early Childhood education, primary, secondary, tertiary and university. The widening secondary school gap between regions and districts can only be understood through in-depth studies, which seek to determine the magnitude, extent as well as the social and economic cost of the phenomenon. What is the extent of the high school phenomenon at primary, secondary and tertiary levels? What proportions of the student population study outside their region and district of origin? What is the social and economic cost of this phenomenon to Uganda's educational system?

Irrespective of location or social position, the contribution of each high school to higher education, welfare and development is fundamental. As the study show, the proportion of students who qualified from a single high school matched those who did so from 733 secondary schools around the country. Further research would be needed to identify, investigate and document the effectiveness and the efficiency of the different schooling models being used. Research on schooling models in urban and rural areas would be important in accounting for the variations in access to higher educational opportunities. This could help in the formulation, adaptation and scaling up of the minimum quality standards that make these schools meet the basic requirements for transition, which the majority of the schools in the country do not.

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# Appendix A: Geoffrey Odaga's Curriculum Vitae

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## SUMMARY OF PROFILE

**Development Leadership and management experience:** I have 20 years of experience in the field of International Development. My career background spans seven major International NGOs, working across the three continents of Africa, Asia and Latin America. This includes six career years as **Regional Director for Africa** for an International NGO (2012-2017); five years as the **Global Coordinator** for a World Bank funded project (2007-2012), four years as a **Monitoring and Evaluation Manager** (2000-2003), and four years as **Director for Research, Advocacy and Knowledge Management** (2003-2007). My professional experience and knowledge is focused on the Sustainable Development Goals (SDGs), especially goal one-poverty eradication, goal four-quality education, goal five-gender equality, goal eight-decent work and economic growth, goal 10-reduced inequality, goal 13-climate action, and goals 16 and 17-peace, justice and strong institutions respectively.

## SUMMARY OF WORK EXPERIENCE

**Africa Regional Director, Room To Read**, from April 2014 to November 2019. I held the position of **Associate Africa Regional Director**, from May 2012 to March 2014 and then **Africa Regional Director** from April 2014 to November 2019. In these roles, I was responsible for providing overall operational leadership and management of the Africa portfolio. This included:

- Managing day to day work plans of Country Directors to ensure effective management of the organization's finances, human resources, assets and stakeholders in the region
- Reviewing and approving major expenditures, to maximise efficiencies in resource utilization, ensure sound management practices and alignment to organisational policies and standards
- Overseeing country management's preparation of annual plans and budgets to ensure strategies and programme chosen are consistent with international strategy
- Facilitating programme design to improve programme outcomes, results and impact in the region
- Developing the Monitoring, Evaluation and learning framework for the programme
- Planning and organizing country programme reviews and evaluations
- Reviewing and validating annual goals, strategies, plans, budgets and forecasts to ensure country programmes remained on course
- Setting the vision and strategy for the programme along with my Headquarter colleagues and country programmes teams and providing the framework within which country programme's leadership and management operated
- Developing standard operational policies, systems, processes and ensured oversight for country programmes
- Leading Country management teams' recruitment, placement, on boarding and transition processes;
- Managing, supervising and leading Country teams' performance management, motivation and professional development
- Building management and leadership capacity at Country level; coaching, mentoring and developing leadership teams on strategy, peoples management, systems and processes
- Overall responsibility for audit findings and implementation of audit recommendations
- Monitoring performance trends, closely taking actions to guide and direct Country Management teams to maximize the impact and quality of the mission

**Global Coordinator, the Civil Society Education Fund, October, 2007-April 2012, The Global campaign For Education (GCE):** I provided overall strategic direction, leadership, planning, management and coordination for

projects and partners in 62 countries. Specifically;

- Leading organizational wide processes to develop monitoring, evaluation and learning (MEL) systems
- Facilitating and managing baseline surveys, midterm and end of project reviews and evaluations
- Facilitating reflection and learning workshops to review and make adjustments to project Results Framework, Theory of problem (TOB) and theory of change (TOC) as the project contexts evolved; ensuring results for which project activities were implemented are achieved; that reporting and accountability are done in a manner inclusive of organizational wide needs and focused funding decisions on achieving and tracing long term policy and systems change;
- Overseeing organizational wide planning, reporting and accountability systems and processes
- Managing complex and multiple partners' reporting, accountability and compliance processes, harmonizing different requirements into one programme
- Managing implementation and reviews of partners annual Work Plans and budgets to ensure project activities were implemented on time, budget and with quality
- Reviewing and signing off all financial and narrative reports from project activities
- Ensuring compliance with grants terms and conditions, Policies and Procedures, and adherence to sound financial and operational standards
- Developing and implementing organizational wide policies, systems, tools and procedures focused on tracing systems change and meeting diverse organizational wide needs for learning and accountability
- Leading global level processes to identify high impact grantees and partners at country and regional levels
- Conducting partnership and organizational assessments, writing recommendations for grants decision making and negotiating project budgets and contracts
- Undertaking periodic reflections, reviews and field support visits to ensure each grant project was implemented on time, budget and with quality
- Leading project reviews and evaluation to ensure results for which grants are made were achieved
- Ensuring regular and timely preparation, presentation and submission of annual, biannual and quarterly project work plans and budgets
- Preparing, presenting and submitting biannual and quarterly reports as well as Interim Financial Statements (IFS) in line with partnership results Framework and Monitoring and evaluation plan
- Overseeing day to day project activities, including grants disbursement to project activities, management, implementation, communication and coordination for all partner activities in all project countries
- Organizing and attending Bimonthly project management Skype calls and face to face management meetings with partners
- Undertaking regular and periodic monitoring, reviews and field support visits to project countries, to ensure each partner project strategy and plan was implemented on time, budget and with quality, and in compliance with policies and procedures
- Representing the organization in all meetings and conferences, attending and speaking at relevant international meetings and events
- Monitoring, documenting and disseminating major policy trends and events that impacted on project priorities and activity implementation to ensure implementation remained on track
- Establishing and maintaining strong working relationship with international NGOs, policy makers, bilateral and multilateral agencies in all project countries; to maximize leverage over policy influencing, ensure the project had access to the best networks, strategic relationships, government officials, donors, media and civil society contacts available.
- Working collaboratively with the senior leadership team to set the vision and annual goals for current and future grants, growing and scaling up our impact from 42 to 62 countries.

#### **Monitoring and Evaluation Manager, Save the Children Denmark, April 2000 to December 2002**

- Developing Monitoring, Evaluation and Learning systems and tools to implement specific projects in programme countries
- Preparing and coordinating major country level studies and research projects
- Organizing and executing country level Information gathering and data collection
- develop indicators
- undertake qualitative and quantitative studies
- Collating field data and managing databases
- Undertaking data management, data analysis, report writing, publication and dissemination of key finding.

- Hiring consultants for project planning, reviews and evaluations
- Organizing and implementing programme reviews and evaluation activities
- Preparing, executing and following up on Strategic planning and annual planning and budgeting processes
- Developing Knowledge management systems and tools
- Developing training materials, conducting and facilitating Training
- Writing and drafting reports
- Leading press briefings and public events
- Designing Qualitative and quantitative Research projects
- Developing research Methodology
- Writing Research proposal
- Developing monitoring and evaluation indicators
- Managing Government relations, stakeholder and Community engagement
- Project Proposal Development
- Fund Raising
- Engaging with Media, Private Sector and NGOs

#### **Community Development Manager, ActionAid Uganda, March 1999 to March 2000**

- Overall responsibility for a development area in Eastern Uganda
- Managing the Child Sponsorship program (the primary funding model for the organization)
- Managing a team of 9 development workers
- Overall responsibility for financial management, reporting and accountability
- Overall responsibility for office and fleet management
- Represented the organization in the NGO community and with government, donors and media

#### **Monitoring and Evaluation Manager, ActionAid Uganda, January 1998 to February 1999**

- Developing Project Results Framework, monitoring, evaluation and learning (MEL) systems
- Designing and implementing baseline surveys, midterm and end of project reviews and evaluations
- Managing and coordinating the preparation, presentation, submission, implementation and reviews of annual work plans and budgets
- Organizing and facilitating country level reflection workshops with partners, to review progress and make adjustments to project Results Framework, Theory of problem (TOB) and theory of change (TOC)
- Coordinating and managing country level project planning, reporting, accountability and knowledge management activities
- Managing multiple grants agreements, reporting, accountability and compliance processes and different donor requirements
- Preparing, presenting and submitting biannual and quarterly reports as well as Interim Financial Statements (IFS) to donors

#### **Education**

1. Doctor of Philosophy (PhD) in the subject of Development Studies, University of South Africa; March 2016-December 2019
2. Master of Arts in Development Studies-University of South Africa- March 2012-March 2015
3. Honors, Bachelor of Arts in Development Studies-University of South Africa; March 2010-March 2011
4. Masters of Arts in Social Sector Planning and Management-Makerere University, Kampala, Uganda; June 2001-June 2002, (pending Dissertation)
5. NGO Management– Aarhus, Denmark, September 2003-December 2003: a fellowship program awarded by the Royal Danish Ministry of Foreign Affairs
6. Bachelor of Arts in Social Work and Social Administration (with Honors) Makerere University, Kampala Uganda; June 1994-June 1997



## Appendix B: Student population by high school of qualification

The table below provides a summary of public university student population from of a total of 1 178 that accounted for the public university student population of 101 504 from 2009 to 2017:

ADVANCE LEVEL SECONDARY SCHOOL	NUMBER OF MALE STUDENTS	NUMBER OF FEMALE STUDENTS	TOTAL	DISTRICT OF SCHOOL LOCATION
ST MARY'S SS KITENDE	1160	990	2150	WAKISO
SEETA HIGH SCHOOL MUKONO	865	898	1763	MUKONO
MENGO SEC SCHOOL ,KAMPALA	1001	635	1636	KAMPALA
NAALYA SEC SCHOOL ,KAMPALA	786	778	1564	KAMPALA
LUBIRI SECONDARY SCHOOL	813	672	1485	KAMPALA
NAMIREMBE HILLSIDE S S	673	685	1358	WAKISO
BUDDO SS, KAMPALA	542	724	1266	KAMPALA
GOMBE SECONDARY SCHOOL	619	543	1162	MPIGI
UGANDA MARTYRS SS NAMUGONGO	528	492	1020	WAKISO
MAKERERE COLLEGE SCHOOL	551	431	982	KAMPALA
OLD KAMPALA SECONDARY SCHOOL	546	365	911	KAMPALA
BP CYPRIAN KIHANGIRE SS LUZIRA	420	436	856	KAMPALA
DIPLOMA	452	360	812	
NABISUNSA GIRLS' SCHOOL	5	798	803	KAMPALA
MERRYLAND HIGH SCHOOL	466	331	797	WAKISO
KIBULI SECONDARY SCHOOL	527	252	779	KAMPALA
NTINDA VIEW COLLEGE	632	143	775	KAMPALA
MASAKA SECONDARY SCHOOL	465	295	760	MASAKA
KYAMBOGO COLLEGE SCHOOL	508	239	747	KAMPALA
VALLEY COLLEGE SS BUSHENYI	444	297	741	BUSHENYI
LUGAZI MIXED SEC SCH	347	362	709	BUIKWE
KATIKAMU SEC SCH WOBULENZI	342	351	693	LUWEERO
ST MARY'S COLLEGE LUGAZI	415	267	682	BUIKWE
EAST HIGH SCHOOL, KAMPALA	363	303	666	KAMPALA
HILTON HIGH SCHOOL	357	274	631	MUKONO
BWERANYANGI GIRLS' SCHOOL	0	623	623	BUSHENYI
KAWEMPE MUSLIM SS	375	233	608	KAMPALA
IMMACULATE HEART GIRLS SCHOOL	0	606	606	RULUNGIRI
KAKUNGULU MEM SCH KAMPALA	300	301	601	KAMPALA
MANDELA S S HOIMA	323	266	589	HOIMA
MBARARA HIGH SCHOOL	442	141	583	MBARARA

OUR LADY OF AFRICA SS NAMILYANGO	272	307	579	MUKONO
NTARE SCHOOL	508	61	569	MBARARA
ST MARK'S SS NAMAGOMA	290	279	569	MUKONO
KITANTE HILL SCHOOL	268	285	553	KAMPALA
NDEJJE SECONDARY SCHOOL	315	237	552	LUWEERO
KINAAWA HIGH SCHOOL	281	257	538	WAKISO
BULOBA HIGH SCHOOL	235	284	519	WAKISO
ST MARY'S COLLEGE KISUBI	487	30	517	WAKISO
LUZIRA LAKESIDE COLLEGE	254	249	503	KAMPALA
MBOGO MIXED SEC SCHOOL	278	218	496	KAMPALA
SEROMA CHRISTIAN HIGH SCHOOL	235	258	493	MUKONO
KAJANSI PROGRESSIVE SS	250	240	490	WAKISO
KIBIBI SECONDARY SCHOOL	238	252	490	MPIGI
ST PETER'S S S NSAMBYA	287	193	480	KAMPALA
MBOGO HIGH SCHOOL	66	403	469	KAMPALA
LONDON COL ST LAWRENCE MAYA	222	222	444	KAMPALA
WAMPEWO NTAKE SEC SCHOOL	214	225	439	WAKISO
ST AUGUSTINE COL WAKISO	197	239	436	WAKISO
KIIRA COLLEGE BUTIKI	371	55	426	JINJA
GAYAZA HIGH SCHOOL	0	424	424	WAKISO
LUBIRI HIGH SCHOOL	202	215	417	KAMPALA
PLUS TWO HIGH SCHOOL	282	127	409	BUSHENYI
TRINITY COLLEGE NABBINGO	0	258	408	WAKISO
NAMILYANGO COLLEGE	362	42	404	MUKONO MC
ST AGNES GIRLS SECONDARY SCHOOL	0	397	397	BUSHENYI
MIDLAND HIGH SCHOOL	212	165	377	KAMPALA
ST JOSEPH'S GIRLS, NSAMBYA	1	375	376	KAMPALA
ST MARY'S SS KITENDE (ANNEX)	212	162	374	WAKISO
BULO PARENTS S S	185	187	372	MPIGI
SEETA H/S GREEN CAMPUS MUKONO	171	201	372	MUKONO
BISHOP'S SEC SCHOOL MUKONO	217	152	369	MUKONO MC
KIGEZI HIGH SCHOOL	239	130	369	KABALE
ST LAWRENCE H SCHOOL NABBINGO	140	228	368	WAKISO
ST JOSEPH'S S S NAGGALAMA	164	202	366	MUKONO
ST PETER'S SS, NAALYA	184	177	361	WAKISO
CALTEC ACADEMY MAKERERE	201	159	360	KAMPALA
IGANGA SECONDARY SCHOOL	122	237	359	IGANGA

ST MARY'S SS KITENDE (ANNEX)	204	155	359	WAKISO
CENTRAL COLLEGE, MITYANA	210	146	356	MITYANA
MUNTUYERA HIGH SCHOOL KITUNGA	349	1	350	NTUNGAMO MC
MIGADDE COLLEGE BOMBO	172	176	348	LUWEERO
MITYANA SECONDARY SCHOOL	166	175	341	MITYANA
KAWANDA S S	170	169	339	WAKISO
NAMAGABI S S	195	143	338	KAYUNGA
ST ANDARD COLLEGE NTUNGAMO	189	147	336	NTUNGAMO
RUBAGA GIRLS' SCHOOL	5	329	334	KAMPALA
ST MARIA GORETTI SS KATENDE	119	215	334	MPIGI
BAPTIST HIGH SCHOOL KITEBI	144	180	324	KAMPALA
MARYHILL HIGH SCHOOL	0	322	322	MBARARA
MT ST MARY'S NAMAGUNGA	1	320	321	MUKONO
CRESTED SEC SCHOOL KAMPALA	169	148	317	KAMPALA
NAMIRYANGO SS	141	169	310	KAMPALA
ST LAWRENCE CITIZEN H S HORIZON	2	307	309	WAKISO
JINJA PROGRESSIVE SS	192	113	305	JINJA
KYADONDO SS	145	158	303	WAKISO
NAMUGOONA PARENTS SCHOOL	157	143	300	KAMPALA
WANYANGE GIRLS SCHOOL	0	297	297	JINJA
ST KALEMBA SECONDARY SCHOOL	126	167	293	KAYUNGA
CITIZEN'S SECONDARY SCHOOL	140	152	292	IBANDA
MENGO SECONDARY SCHOOL ANNEX	145	142	287	KAMPALA
ST LAWRENCE SS SSONDE	150	134	284	MUKONO
LUBIRI SECONDARY SCHOOL (ANNEX)	140	143	283	KAMPALA
BLESSED SACREMENT SS KIMAANYA	126	147	273	MASAKA
BUSOGA COLLEGE MWIRI	273	0	273	JINJA MC
ST HENRY'S COLLEGE, KITOVU	183	88	271	MASAKA
MPOMA SCHOOL	0	263	263	LUWEERO
UGANDA MARTYRS' HIGH SC RUBAGA	139	120	259	KAMPALA
JINJA SECONDARY SCHOOL	176	82	258	JINJA
SSAKU SEC SCHOOL	118	140	258	LUWEERO
OUR LADY OF AFRICA SS	136	119	255	WAKISO
MERRYLAND HIGH SCHOOL - ANNEX	155	99	254	WAKISO
MULUSA ACADEMY LUWERO	146	107	253	LUWEERO
KISUBI MAPEERA S S	107	142	249	WAKISO
OUR LADY OF GOOD COUNSEL	71	178	249	WAKISO

BETHANY HIGH SCH KAMPALA	127	119	246	WAKISO
BRILLIANT HIGH SCH KAWEMPE	120	126	246	KAMPALA
TORORO GIRLS' SCHOOL	0	245	245	TORORO
KABOWA HIGH SCHOOL	124	118	242	KAMPALA
ROCK HIGH SCHOOL TORORO	162	79	241	TORORO
MM COLLEGE WAIRAKA	145	90	235	MITYANA
KISAASI COLLEGE SCHOOL	109	121	230	KAMPALA
MUGWANYA SUMMIT COLLEGE	105	123	228	KAMPALA
KASUBI SS	103	121	224	KAMPALA
ST MICHAEL HIGH SCHOOL	115	108	223	MUKONO
KANJUKI S S	96	126	222	KAYUNGA
KITENDE S S	109	113	222	WAKISO
GREENHILL ACADEMY KAMPALA	93	128	221	KAMPALA
MAKINDYE SECONDARY SCHOOL	104	116	220	KAMPALA
MPALE SECONDARY SCHOOL	165	54	219	MPALE
ST MARY'S COLLEGE, RUSHOROZA	125	93	218	KABALE
CORNERSTONE LEADERSHIP ACADEMY MATUGGA	107	109	216	LUWEERO
KISUBI HIGH SCHOOL	122	90	212	WAKISO
STELLA MARIS COLLEGE, NSUBE	93	119	212	MUKONO
KABALE TRINITY COLLEGE	96	115	211	KABALE
MACKAY MEMORIAL SCHOOL NATETE	94	116	210	KAMPALA
ST KIZITO SS BUGOLOBI	104	105	209	KAMPALA
ST JOSEPH'S VOC SCH MBARARA	206	0	206	MBARARA
NSAMBYA HILL SIDE SCHOOL	122	83	205	KAMPALA
MITYANA MODERN SS	113	86	199	MITYANA
RINES SECONDARY SCHOOL	81	116	197	WAKISO
ST PETER'S COLLEGE TORORO	197	0	197	TORORO
TESO COLLEGE ALOET	197	0	197	SOROTI
BUKOYO SECONDARY SCHOOL	128	67	195	IGANGA
CRANE H S KITINTALE	104	89	193	KAMPALA
LUWERO SECONDARY SCHOOL	114	79	193	LUWEERO
KOLOLO SECONDARY SCHOOL	125	64	189	KAMPALA
ST MARY'S COLLEGE RUSHOROZA	100	88	188	KABALE
KYEBAMBE GIRLS' SEC SCHOOL	11	176	187	KABAROLE
ST MARY'S VOC SCH, KYAMUHUNGA	110	77	187	BUSHENYI
ST PETER'S SS NAALYA	96	91	187	WAKISO
MASAKA SECONDARY SCHOOL ANNEX	100	86	186	MASAKA

MAKERERE DAY AND EVENING ADULT SCHOOL	61	124	185	KAMPALA
ST MICHAEL INTERNATIONAL SCHOOL	93	92	185	WAKISO
ST LAWRENCE COLLEGE, PALAIS	88	93	181	KAMPALA
BP CYPRIAN H SCHOOL KYABAKADDE	79	100	179	KAMPALA
CLEVERLAND HIGH SCHOOL	110	69	179	MBARARA
MARIAM HIGH SCHOOL KAMPALA	8	168	176	KAMPALA
NAKASEKE SECONDARY SCHOOL	104	70	174	NAKASEKE
JINJA COLLEGE	169	0	169	JINJA
NILE HIGH SCHOOL	85	83	168	KAMPALA
KAWEMPE MUSLIM HIGH SCHOOL	88	79	167	KAMPALA
KYEIZOBA GIRLS' SEC SCHOOL	39	126	165	BUSHENYI
TROPICAL HIGH SCH KAMPALA	89	75	164	KAMPALA
BUGEMA ADVENTIST COLLEGE K'LA	71	92	163	WAKISO
JINJA SECONDARY SCHOOL	95	67	162	JINJA
KINYANSANO GIRLS' HIGH SCHOOL	0	162	162	RUKUNGIRI
NABUMALI HIGH SCHOOL MBALE	85	77	162	MBALE
ST KAGGWA BUSHENYI HIGH SCH	140	22	162	BUSHENYI
KABALE BRAINSTORM HIGH SCHOOL	87	71	158	KABALE
ST JOSEPH'S COLLEGE,NAMAGUNGA	76	82	158	MASAKA
ST NOA'S GIRLS SEC SCH	8	149	157	WAKISO
ST JOSEPH OF NAZARETH HS	79	77	156	KAMPALA
MBOGO COLLEGE SCHOOL	80	73	153	KAMPALA
BUDINI SECONDARY SCHOOL	61	90	151	KALIRO
ALLIANCE HIGH SCHOOL NANSANA	74	76	150	WAKISO
TURKISH LIGHT ACADEMY	145	0	145	KAMPALA
BWEYOGERERE SS	77	67	144	WAKISO
IGANGA HIGH SCHOOL	94	49	143	IGANGA
ST ANDREA KAHWA'S COL HOIMA	90	53	143	HOIMA
KAMPALA SECONDARY SCHOOL	99	43	142	KAMPALA
NTUNGAMO HIGH SCHOOL	71	71	142	NTUNGAMO
NGORA HIGH SCHOOL	67	74	141	NGORA
ST ANDARD HIGH SCHOOL, NDEJJE	72	69	141	LUWEERO
MUKONO HILLSIDE COLLEGE SCHOOL	78	62	140	MUKONO
KABALEGA SECONDARY SCHOOL	113	26	139	MASINDI
CENTENARY HIGH SCH NYENDO	78	60	138	MASAKA
ST CHARLES LWANGA INT SS, KAKIR	57	80	137	WAKISO
NYAKASURA SCHOOL	100	36	136	KABAROLE

KAWEMPE ROYAL COLLEGE	62	73	135	KAMPALA
KITAGATA SECONDARY SCHOOL	95	38	133	SHEEMA
SEBEI SECONDARY SCHOOL	71	61	132	KAMPALA
HANA MIXED SCHOOL	77	54	131	KAMPALA
ST NOA MAWAGALI SS JINJA	64	65	129	JINJA
BISHOP COMBONI COL KAMBUGA	65	62	127	RUKUNGIRI
ROYAL COLLEGE MAKINDYE	55	71	126	KAMPALA
NGANWA HIGH SCHOOL	123	2	125	BUSHENYI
ST EDWARD'S SCHOOL BUKUMI	81	43	124	KIBAALE
LIGHT COLLEGE, KATIKAMU	62	61	123	LUWEERO
MT ST HENRY'S HIGH SCHOOL	66	56	122	MUKONO
NSAMBYA SECONDARY SCHOOL	56	65	121	KAMPALA
BUSOGA HIGH SCHOOL	79	41	120	KAMULI
ST PAUL'S COLLEGE, MBALE	68	52	120	MBALE
ST LUCIA HILL SCHOOL	48	71	119	WAKISO
EMMA HIGH SCHOOL	69	49	118	KAMPALA
ST KIZITO KATIKAMU KISULE	63	55	118	LUWEERO
ENTEBBE SECONDARY SCHOOL	63	54	117	WAKISO
GAYAZA ROAD SECONDARY SCHOOL	50	67	117	WAKISO
ST ANDARD HIGH SCHOOL KAMPALA	63	54	117	KAMPALA
ST STEPHEN'S COLLEGE BAJJA	73	43	116	KALUNGU
KAKO SECONDARY SCHOOL	73	42	115	MASAKA
KINGSWAY HIGH SCHOOL	57	57	114	WAKISO
MITA COLLEGE KAWEMPE	56	58	114	KAMPALA
PROGRESSIVE SS BWEYOGERERE	57	57	114	WAKISO
KIBUBURA GIRLS' SEC SCHOO	0	112	112	IBANDA
SACRED HEART SS MUSHANGA	47	65	112	BUSHENYI
ST THEREZA'S GIRLS' SS,BWANDA	30	82	112	BUSHENYI
KIGUMBA INTENSIVE SS	70	41	111	KIRYANGDONGO
ROYAL GIANT HS	58	52	110	MITYANA
ATLAS HIGH SCHOOL	61	47	108	WAKISO
PRIDE COLLEGE SCHOOL MPIGI	32	76	108	MPIGI
WITS COLLEGE NAMULANDA	42	65	107	WAKISO
CITY HIGH SCHOOL	59	47	106	KAMPALA
KALINABIRI SEC SCHOOL	53	53	106	KAMPALA
HILLSIDE ACADEMY SS ITOJO	65	39	104	NTUNGAMO
RENA COLLGE MAYUGE	61	42	103	MAYUGE

KOLOLO HIGH SCHOOL	57	45	102	KAMPALA
LOWELL GIRLS' SCHOOL	1	101	102	KAMPALA
LUGAZI HOMELAND COLLEGE	43	58	101	BUIKWE
GOOD SHEPHERD HIGH SCHOOL	47	53	100	PALLISA
MAKOBORE HIGH SCHOOL	98	2	100	RUKUNGIRI
BROADWAY HIGH SCHOOL KAMPALA	46	53	99	KAMPALA
BUSIA TRUST S S	76	23	99	BUSIA
LUGAZI HOMESTONE SCHOOL	55	43	98	BUIKWE
EXCELL SEC SCH MUKONO	63	34	97	MUKONO
JINJA SS ANNES	65	31	96	JINJA
KISOZI HIGH SCHOOL	46	50	96	WAKISO
MOUNT OF OLIVES COLLEGE KAKIRI	7	89	96	KAMPALA
NAKASEKE INTERNATIONAL COLLEGE	62	34	96	NAKASEKE
ST JULIAN HIGH SCHOOL	43	53	96	WAKISO
ST LEO'S COLLEGE KYEBOBE	95	1	96	KABAROLE
ALLIANCE SECONDARY SCHOOL	64	31	95	KAMPALA
MASHERUKA SECONDARY SCHOOL	0	95	95	BUSHENYI
ST BALIKUDEMBE SSS KISOGA	59	36	95	MUKONO
ST HENRY'S COLLEGE, GANGU	44	51	95	WAKISO
TORORO PROGRESSIVE SEC SCHOOL	55	40	95	TORORO
CHRIST THE KING SEC SCHOOL	10	84	94	RAKAI
GRACE HIGH SCHOOL	46	48	94	WAKISO
NAJJANANKUMBI YOUNG X-TIAN SS	47	47	94	WAKISO
SEAT OF WISDOM SS KASAWO	50	43	93	KAYUNGA
ST JANAN LUWUM SS	47	46	93	WAKISO
KASAWO SECONDARY SCHOOL	61	31	92	MUKONO
LUWERO SECONDARY SCHOOL	44	48	92	LUWEERO
MVARA SECONDARY SCHOOL	51	41	92	ARUA
WORLD AHEAD SS, MATUGGA	51	41	92	WAKISO
BISHOP OGEZ H SCHOOL ISHAKA	56	35	91	BUSHENYI
GAYAZA CAMBRIDGE COLLEGE	53	38	91	WAKISO
IBANDA SECONDARY SCHOOL	30	61	91	IBANDA
DR OBOTE COLLEGE BOROBORO	57	33	90	LIRA
JERESSAR HIGH SCHOOL	61	29	90	SOROTI
YALE HIGH SCHOOL, KAYUNGA	47	41	88	KAYUNGA
KASHAKA GIRLS SS	0	86	86	MBARARA
ST LAWRENCE HIGH SCH LUBAGA	66	20	86	KAMPALA

BOMBO SECONDARY SCHOOL	47	37	84	LUWEERO
HOLY CROSS LAKE VIEW SS JINJA	37	46	83	JINJA
IGANGA PROGRESSIVE SEC SCHOOL	57	26	83	IGANGA
MPOMA ROYAL COLLEGE	36	47	83	LUWEERO
ST KIZITO HIGH SCH NAMUGONGO	42	40	82	WAKISO
PMM GIRLS' SCHOOL JINJA	7	74	81	JINJA MC
SENTAH COLLEGE	55	26	81	MBARARA
TRINITY SENIOR ACADEMY	40	41	81	WAKISO
LIGHT SEC AND VOC SCH BULENGA	35	45	80	WAKISO
NAMBOOLE HIGH SCHOOL	38	42	80	WAKISO
SUMMAYYA GIRLS SS NSANGI	6	74	80	WAKISO
ISHAKA VOCATIONAL SS	54	25	79	BUSHENYI
LORDS MEADE VOCATIONAL COLLEGE	39	40	79	JINJA
MUYENGA HIGH SCHOOL	26	53	79	KAMPALA
TALENTS COLLEGE MUKONO	28	51	79	MUKONO
KISUBI SEMINARY	78	0	78	WAKISO
KISIKI COLLEGE NAMUTUMBA	48	29	77	NAMUTUMBA
KISORO VISION	48	29	77	KISORO
ST HENRY'S GIRLS SS BUYEGE	13	64	77	MPIGI
KAKUNGULU HIGH SCHOOL, BOMBO	35	41	76	LUWEERO
ST GERALDS' SS NYAKIBALE	49	27	76	RUKUNGIRI MC
MPIGI MIXED SS	37	38	75	MPIGI
NOAH'S ARK SEC SCHOOL KAMPALA	41	34	75	KAMPALA
ST MBUGA VOCATIONAL SS	38	36	74	WAKISO
CROWN HIGH SCHOOL	29	44	73	WAKISO
KENNEDY SS KAMPALA	31	42	73	KAMPALA
ST CHARLES LWANGA SS, MUBENDE	35	38	73	MUBENDE
BWERA S S	42	30	72	KASESE
HOPE SENIOR SCHOOL NAKIREBE	37	35	72	MPIGI
KITEREDDE SECONDARY SCHOOL	71	1	72	RAKAI
MUMSA HIGH SCHOOL MITYANA	43	29	72	MITYANA
ST CECILIA GIRLS SS	1	71	72	BUSHENYI
IRMA PFIFFER BWEYA H S KISUBI	42	29	71	WAKISO
KINONI HIGH SCHOOL	38	32	70	MBARARA
LUZIRA SSS	29	40	69	KAMPALA
MAKERERE MODERN SS	29	40	69	KAMPALA
CRANE HIGH SCHOOL KAMPALA	40	28	68	KAMPALA

BWONGYERA GIRLS' SEC SCHOOL	0	67	67	NTUNGAMO
CENTRAL COLLEGE MITYANA	41	26	67	MITYANA
KIGEZI COLLEGE BUTOBERE	61	6	67	KABALE
KIREKA HIGH SCHOOL	28	39	67	WAKISO
RISE AND SHINE HIGH SCHOOL	37	30	67	KAMPALA
SAM IGA MEM COL KAMPALA	34	33	67	WAKISO
ST JOHN'S SS, MUKONO	25	42	67	MUKONO
ST KIZITO HIGH SCHOOL BETHANY	1	66	67	MITYANA
UNIVERSAL GIRLS HS KAMPALA	26	41	67	KAMPALA
VINE HIGH SCHOOL	32	35	67	BUSHENYI
BRIGHTWAY HILL SCH BUKESA	27	39	66	KAMPALA
MBALE COMPREHENSIVE HS	33	33	66	MBALE
POPE JOHN PAUL II COLLEGE	41	25	66	NWOYA
ST PAUL'S SEMINARY, KABALE	66	0	66	KABALE
BILAL ISLAMIC INSTITUTE	46	19	65	WAKISO
BILAL ISLAMIC SEC SCHOOL BWAISE	32	33	65	KAMPALA
CITYLAND COLLEGE MATUGGA	26	39	65	LUWEERO
HOPE BOARDING SS LUTEMBE	30	35	65	WAKISO
KIBOGA PROGRESSIVE SCHOOL	40	25	65	KIBOGA
PAUL MUKASA SS	32	33	65	MUKONO
ST BALIKUDEMBE SS MITALAMARIA	28	37	65	MPIGI
KITARA SECONDARY SCHOOL	33	31	64	HOIMA
SOROTI SECONDARY SCHOOL	47	17	64	SOROTI MC
ST THOMAS AQUINAS SS, KAWEMPE	36	28	64	KAMPALA
TAIBAH HIGH SCHOOL, KAWEMPE	0	64	64	KAMPALA
BUBANGIZI S S	41	22	63	MITOOMA
DUHAGA SECONDARY SCHOOL	39	24	63	HOIMA
MATURE ENTRIES	43	20	63	
ST MARY'S GIRLS' COLLEGE, ABOKE	0	63	63	KOLE
UGANDA MARTYRS SS, KAYUNGA	26	37	63	KAYUNGA
TESO INTERGRATED SS NGORA	43	19	62	NGORA
TORORO TOWN COLLEGE	24	38	62	TORORO
NAJEMBE HOMELAND SS	34	27	61	BUIKWE
ST GONZAGA SECONDARY SCHOOL	41	20	61	LYANTONDE
EDEN INTERNATIONAL SCHOOL	31	29	60	MBARARA
ISHAKA VICTORY GIRLS SS	26	34	60	BUSHENYI
CENTRAL COLLEGE, KAMULI	39	20	59	KAMULI

SAN GIOVANNI SCH KARUHINDA	33	26	59	KANUNGU
BUZIIGA ISLAMIC THEOLOGINST	27	31	58	WAKISO
MULAGO SECONDARY SCHOOL	26	32	58	KAMPALA
CHRIST SCHOOL BUNDIBUGYO	12	45	57	BUNDIBUGYO
COMPREHENSIVE COLLEGE KITETIKKA	30	27	57	WAKISO
LAKE VIEW SEC SCHOOL, JINJA	31	26	57	JINJA
ST JOHN'S WAKISO SS	24	33	57	WAKISO
ST JOSEPH'S COLLEGE,NAMAGUNGA	33	24	57	MASAKA
GOOD HEART SS JINJA	31	25	56	JINJA
MOROTO HIGH SCHOOL	37	19	56	MOROTO MC
PROGRESSIVE KITINTALE SS	26	30	56	KAMPALA
AMANANG SEC SCHOOL	29	26	55	BUKWO
BISHOP NKOYOYO SS MATALE	29	26	55	BUIKWE
BULOBA SECONDARY SCHOOL	20	35	55	MPIGI
NANSANA ST JOSEPH SS	17	37	54	WAKISO
NEWCASTLE HIGH SCHOOL KASANGA	29	25	54	KAMPALA
WINSTON STANDARD SS	29	25	54	WAKISO
ST CATHERINE'S COLNAKINYUGUZI	23	30	53	WAKISO
ST JOSEPH'S CENT SS NDEEBA	22	31	53	KAMPALA
KITABI SEMINARY BUSHENYI	52	0	52	BUSHENYI
ST JOSEPH'S COLLEGE, OMBACI	52	0	52	ARUA
EXCEL MILLENIUM HS KAMPALA	17	34	51	KAMPALA
MBARARA MODERN SEC SCHOOL	34	17	51	MBARARA
SEETA HILL COLLEGE MUKONO	24	27	51	MUKONO
ST BARNABAS COLLEGE MIGADDE	28	23	51	LUWEERO
ST ELIZABETH SECSCH NKOOWE	24	27	51	WAKISO
THE NILE COLLEGE, KASANGATI	27	24	51	WAKISO
ZANA MIXED S S	27	24	51	KAMPALA
FAITH HIGH SCHOOL - SONDE	32	18	50	MPIGI
GREENVILLE HIGH SCHOOL, MUKONO	31	19	50	MUKONO
KYAMBOGO COLLEGE SCHOOL (ANNEX)	43	7	50	KAMPALA
PREMIER HIGH SCHOOL KAMPALA	29	21	50	KAMPALA
RUKUNGIRI CENTRAL S S	35	15	50	RUKUNGIRI
VICTORIA HIGH SCHOOL NANSANA	31	19	50	WAKISO
WAKISO MUSLIM SECONDARY SCHOOL	20	30	50	WAKISO
BOSTON HIGH SCHOOL	26	23	49	WAKISO
KASENYI SECONDARY SCHOOL	30	19	49	MUBENDE

KAWOMBE MEMORIAL SS	26	23	49	
KYAMAKANDA SEC SCHOOL	32	17	49	RUKUNGIRI
MUKONO HIGH SCHOOL	20	29	49	MUKONO MC
MULAMA SECSCHOOL	26	23	49	LUWEERO
HIGH LIGHT SS	34	14	48	KANUNGU
LUKALU SEC SCHOOL	18	30	48	BUTAMBALA
ST KIZITO SECSCH KABOWA	29	19	48	MUKONO
CITY VIEW SECONDARY SCHOOL	30	17	47	KAMPALA
LUNAH INTERNATIONAL COLLEGE	26	21	47	KAMULI
MAKERERE SECONDARY SCHOOL	20	27	47	KAMPALA
ST JOHN'S SECSCHOOL,NTEBETEBE	20	27	47	WAKISO
ST THEREZA'S GIRLS' SS BWANDA	6	41	47	KASESE
TAIBAH COLLEGE SCHOOL	20	27	47	WAKISO
BURYANSUNGWE S S	22	24	46	IBANDA
GREENLIGHT HIGH SCH KAMPALA	26	20	46	KAMPALA
MBALALA SS	17	29	46	MUKONO
MBUYA COLLEGE SCHOOL	22	24	46	KAMPALA
SKYLAND HIGH SCHOOL	28	18	46	LIRA
ST JOHN'S SECSCH, KABUWOKO	23	23	46	RAKAI
WANALE VIEW SEC SCHOOL MBALE	26	20	46	MBALE
MANJASI HIGH SCHOOL	35	10	45	TORORO
MUNI GIRLS' SEC SCHOOL	15	30	45	ARUA
NYABUBARE SECONDARY SCHOOL	24	21	45	KANUNGU
ST BRUNO SSERUNKUMA'S SS,GOLI	24	21	45	MPIGI
AISHA GIRLS HIGH SCH, MBARARA	0	44	44	ISINGIRO
KITEBI SS	25	19	44	KAMPALA
LONDON HIGH SCHOOL NANSANA	22	22	44	KAMPALA
SERWANGA-LWANGA MEMORIAL SS	20	24	44	KALANGALA
ADUKU SECONDARY SCHOOL	26	17	43	APAC
MANDELA COL SCH BWEYOGERERE	26	17	43	WAKISO
MASINDI HALL	31	12	43	MASINDI
ST JOHN'S COLLEGE MPIGI	22	21	43	MPIGI
ARUA PUBLIC SCHOOL	20	22	42	ARUA MC
FAIHA HIGH SCHOOL	17	25	42	KAMPALA
KIGEZI CLEVERLAND HIGH SCHOOL	34	8	42	KABALE
NANSANA S S	23	19	42	WAKISO
ST MARKS SECSCHOOL KAMMENGO	14	28	42	MPIGI

ST MARY'S SS NKOZI	15	27	42	MPIGI
BUSIA GIRLS BOARDING SCHOOL	1	40	41	BUSIA
CITY SS KASUBI	19	22	41	KAMPALA
KIKAAYA COLLEGE SCHOOL	23	18	41	WAKISO
MBALE PROGRESSIVE SS	24	17	41	MBALE
ST JOSEPH'S COLLEGE, LAYIBI	41	0	41	GULU MC
ST PONTIANO NGONDWE SS	27	14	41	JINJA
ST THOMAS AQUINAS COLLEGE KAWEMPE	17	24	41	KAMPALA
AIDAN COLLEGE KAMPALA	18	22	40	WAKISO
BASAJJABALABA SEC SCH	26	14	40	RUKUNGIRI
BUKOOLI COLLEGE	30	10	40	BUGIRI
EMMANUEL COLLEGE KAZO-KAMPALA	21	19	40	KAMPALA
MPANGA SECONDARY SCHOOL	25	15	40	KABAROLE
ONWARD AND UPWARD SSS	15	25	40	
ST ANNE GRACE SS NAKIFUMA	19	21	40	MUKONO
ST MARY'S HIGH SCHOOL LUBAGA	28	12	40	KAMPALA
UPHILL COLLEGE, MBUYA	19	21	40	KAMPALA
BULOBA ROYAL COLLEGE	20	19	39	MPIGI
IGANGA PARENT SS	18	21	39	IGANGA
KABAAL SANJE SS	21	18	39	RAKAI
KAKIRA SECONDARY SCHOOL	25	14	39	JINJA
KAMPALA HIGH SCHOOL	15	24	39	KAMPALA
MARY REPARATRIX TC ENTEBBE	9	30	39	WAKISO
NAMUGONGO SEC VOCATIONAL SCHOOL	21	18	39	WAKISO
UBUNTU HILL SCHOOL	21	18	39	WAKISO
BRETHREN MEMO SCH MATUGGA	18	20	38	WAKISO
COUNTRY COLL MUKONO	19	19	38	MUKONO
ENTEBBE SECONDARY SCHOOL	19	19	38	WAKISO
GULU CENTRAL HIGH SCHOOL	19	19	38	GULU
KATENDE HIGH SCHOOL	18	20	38	MPIGI
KIBIBI MUSLIM SS	15	23	38	WAKISO
MBALE SECONDARY SCHOOL - ANNEX	29	9	38	MBALE
SSEKE SENIOR SEC SCHOOL	19	19	38	LWENGO
BUTSIBO S S	24	13	37	SHEEMA
EDEN HIGH SCHOOL	15	22	37	WAKISO
FOREST HILL COLLEGE	14	23	37	MUKONO
KAMPALA STUDENTS' CENTRE	20	17	37	KAMPALA

KING SOLOMON'S COLLEGE	25	12	37	KAMPALA
LANGO COLLEGE LIRA	37	0	37	LIRA
MARGARET SS KIKAYA	13	24	37	KAMPALA
NYAKAYOJO SEC SCHOOL	22	15	37	MBARARA
PROGRESSIVE BRIGHT SS MUKONO	16	21	37	MUKONO
ST ANDARD HIGH SCHOOL, KAMPALA	22	15	37	KAMPALA
ST PAUL'S COLLEGE MBALE	12	25	37	MBALE
CENTRAL ACADEMY KAMPALA	20	16	36	KAMPALA
DABANI GIRLS' SCHOOL	0	36	36	BUSIA
EDIOFE GIRLS' SS	0	36	36	ARUA
NATETE MUSLIM HIGH SCHOOL	14	22	36	KAMPALA
NYABIKONI SSS	20	16	36	KABALE
ST MARY'S GIRLS SS, MADERA	0	36	36	SOROTI MC
BRIGHT FUTURE VOC SS, BWEBAJJA	19	16	35	WAKISO
BUKEDI COLLEGE, KACHONGA	25	10	35	BUTALEJA
EAGLE'S NEST SS KAMPALA	11	24	35	KAMPALA
KINGSTONE H S KAMPALA	20	15	35	KAMPALA
KINKIZI SECONDARY SCHOOL	25	10	35	KANUNGU
KITAGWENDA SECONDARY SCHOOL	28	7	35	KAMWENGE
NAKANYONYI GIRLS SCHOOL	1	34	35	JINJA
SHAMMAH HIGH SCHOOL	17	18	35	LUWEERO
ST BERNARD'S SS MANNYA	23	12	35	RAKAI
ST FRANCIS SS KAWEMPE	17	18	35	KAMPALA
ST JOSEPH'S COLLEGE KISUBI	25	10	35	WAKISO
ST JUDE SS MASAKA	27	8	35	MASAKA
ST MARIA GORETTI GIRLS'	1	34	35	KABAROLE
TRUST HIGH SCHOOL	12	23	35	WAKISO
EQUATORIAL COLLEGE IBANDA	19	15	34	IBANDA
KAZO SECONDARY SCHOOL	19	15	34	KIRUHURA
KILEMBE SECONDARY SCHOOL	25	9	34	KASESE MC
KITAGOBWA SECONDARY SCHOOL	17	17	34	BUTAMBALA
NAKASONGOLA ARMY SCHOOL	14	20	34	NAKASONGOLA
ST CHARLES LWANGA SS, KASASA	29	5	34	HOIMA
STAR SENIOR SCHOOL	17	17	34	KAMPALA
HAWA SEC SCHOOL KAMPALA	13	20	33	KAMPALA
KIBIITO SECONDARY SCHOOL	18	15	33	KABARORA
KICHWAMBA HIGH SCHOOL	21	12	33	BUSHENYI

NANSANA EDUCATION CENTRE	19	14	33	WAKISO
NKUTU MEMORIAL SS BUSESZA	26	7	33	IGANGA
ST CATHERINE SS NABBINGO	19	14	33	WAKISO
ST MARY'S HIGH SCHOOL, MIGADDE	14	19	33	WAKISO
VICTORIA HIGH SCHOOL	17	16	33	WAKISO
APAS SS, NSAMBYA	22	10	32	KAMPALA
BULAMY SECSCH GAYAZA	16	16	32	WAKISO
EXODUS COLLEGE SCHOOL MMENDE	10	22	32	WAKISO
MASABA SECONDARY SCHOOL	16	16	32	SIRONKO
OUR LADY CONSOLATA SS, KIREKA	19	13	32	WAKISO
ST JAMES BIINA HALL LUZIRA	17	15	32	KAMPALA
ST LAWRENCE CITIZENS HS CREAMLAND	18	14	32	KAMPALA
ST PAUL'S S S BUKINDA	19	13	32	KABALE
ST PAUL'S S S BUKINDA	18	14	32	KABALE
CITIZEN'S HIGH SCH MBARARA	18	13	31	MBARARA
KANGOLE GIRLS' SCHOOL	0	31	31	NAPAK
KIBIBI PARENTS SEC SCHOOL	19	12	31	WAKISO
LIGHT HIGH SCHOOL, SEGUKU	21	10	31	KAMPALA
MADINAH ISLAMIC SS NSANGI	13	18	31	WAKISO
NAMUNGOONA HIGH SCHOOL	18	13	31	KAMPALA
NKUMBA SSS	21	10	31	WAKISO
SPRING FIELD HS	17	14	31	WAKISO
ARCHBISHOP KIWANUKA SS KITOVU	24	6	30	MASAKA
BWAISE PARENTS HIGH SCHOOL	19	11	30	KAMPALA
HENRY KASULE MC KAKIRI	17	13	30	WAKISO
JINJA HALL	21	9	30	JINJA
KASESE SEC SCHOOL	15	15	30	KASESE MC
KIRYOKYA PARENTS SEC SCH	14	16	30	MITYANA
MBARARA SECONDARY SCHOOL	19	11	30	MBARARA MC
MITYANA STANDARD SECSCH	18	12	30	MITYANA
MPOMA BOYS'S SECONDARY SCHOOL	30	0	30	LUWEERO
PRIDE SECONDARY SCHOOL	13	17	30	MITYANA
SHARING YOUH CENTRE, NSAMBYA	12	18	30	KAMPALA
ST ANDREW'S COLLEGE SSANDA	11	19	30	KAMPALA
ST MBAGA'S COLLEGE, NADDANGIRA	16	14	30	WAKISO
WEST HERTS COLLEGE, KIKANDWA	16	14	30	WAKISO
BUGISU HIGH SCHOOL	19	10	29	MPALE

BUGWERE HIGH SCHOOL	5	24	29	BUDAKA
CITYSIDE COLLEGE MAKERERE	18	11	29	KAMPALA
KABUWOKO SEC SCHOOL KABONERA	13	16	29	RAKAI
KAGADI PEOPLE'S SS	16	13	29	KIBAALE
NSANGI SECONDARY SCHOOL	14	15	29	WAKISO
ST JAMES SEC SCH, JINJA	11	18	29	JINJA
ST MARY'S COLLEGE LUGAZI ANNEX	14	15	29	BUIKWE
TENDER TALENTS MAGNET SCHOOL	15	14	29	WAKISO
BP KIVENGERE GIRLS', MUYEBE	0	28	28	KABALE
BUREMBA S S	18	10	28	KIRUHURA
GATEWAY HIGH SCHOOL	15	13	28	
KALIRO HIGH SCHOOL	21	7	28	KALIRO
KAMONKOLI COLLEGE PALLISA	6	22	28	BUDAKA
KIRA S S NAMUGONGO	14	14	28	WAKISO
KYEIBARE GIRLS S S	0	28	28	BUSHENYI
MANAFA HIGH SCHOOL	20	8	28	MANAFWA
NALINYA LWANTALE GIRLS' SCHOOL	3	25	28	LUWEERO
OXFORD MUSLIM HS - KAWEMPE	17	11	28	KAMPALA
RUYONZA SECONDARY SCHOOL	21	7	28	BUSHENYI
THE ACADEMY ST LAWRENCE	6	22	28	KAMPALA
EXCEL BOARDING SS	16	11	27	MASINDI
INTERNATIONAL WINDOW GIRLS	2	25	27	MBARARA
KIJAGUZO SEC SCHOOL	11	16	27	NAKASEKE
KYASANKU HILL COLLEGE	6	21	27	MPIGI
MAANJI MEMORIAL ACADEMY	18	9	27	MBARARA
MASAJJA SEC SCHOOL	18	9	27	WAKISO
MEHTA SECONDARY SCHOOL	19	8	27	BUIKWE
PROGRESSIVE MIXED SS WANDEGEYA	23	4	27	KAMPALA
SACRED HEART SEC SCHOOL	0	27	27	GULU MC
ST MARY'S SS SANJE	15	12	27	RAKAI
BUDINSE MEMORIAL SCHOOL	13	13	26	KAMPALA
KAWEMPE PUBLIC SEC SCHOOL	12	14	26	KAMPALA
KAZINGA SEC SCHOOL KALULE	7	19	26	LUWEERO
KINONI INTERGRATED SS	17	9	26	MBARARA
KISOWERA SS	7	19	26	MUKONO
LUGAZI (SCOUL) SEC SCHOOL	16	10	26	BUIKWE
MUTOLERE SECONDARY SCHOOL	26	0	26	KISORO

PIMBAS SENIOR SECONDARY SCHOOL	17	9	26	KAMPALA
ST FRANCIS SEC SCHOOL NANSANA	8	18	26	WAKISO
ST JOHN'S SS NANDERE	13	13	26	LUWEERO
ST MARY'S HS, KATALE - BU	17	9	26	KIBOGA
ST MARY'S SS NAMALIGA	13	13	26	LUWEERO
ST THERESA SS KATENDE	10	16	26	MPIGI
TIMOTHY GIRLS' HIGH SCHOOL	0	26	26	MASAKA
UPLANDS HIGH SCHOOL	14	12	26	KAMPALA
BUGURI HIGH SCHOOL	16	9	25	BUIKWE
CWA II MEMORIAL COLLEGE	9	16	25	KAMPALA
EBENEZER SECONDARY SCHOOL	8	17	25	KASESE
GOMBE SECONDARY SCHOOL, ANNEX	12	13	25	MPIGI
KAYENJE SS	12	13	25	KAYUNGA
LUGOGO CENTRE	11	14	25	KAMPALA
MENLIK SEC SCHOOL MATUGGA	8	17	25	WAKISO
MOTHER KEVIN SS JINJA	15	10	25	JINJA
NAKASONGOLA SECONDARY SCHOOL	16	9	25	NAKASONGOLA
NAMIRYANGO HS GULUMA	10	15	25	KAMPALA
ST GERTRUDE'S VOC GIRLS,KISORO	2	23	25	KISORO
ST JOSEPH'S SS KAKINDU	14	11	25	KAGADI
ST KATHERINE SEC SCHOOL	0	25	25	LIRA
ST PETER'S HIGH SCH JINJA	16	9	25	JINJA
URINGI SECONDARY SCHOOL	17	8	25	NEBBI
YESU AKWAGALA HIGH SCHOOL	13	12	25	MASAKA
BISHOP MCALLISTER COL KYOGERA	15	9	24	BUSHENYI
BOMBO ARMY S S	12	12	24	LUWEERO
EKITANGALA SEC SCH	14	10	24	NAKASONGOLA
FORT-PORTAL SS	16	8	24	KABAROLE
HALCYON HIGH SCHOOL	10	14	24	SOROTI
HAMDAN GIRLS' HIGH SCHOOL	1	23	24	MBALE
KATIKAMU SS GAYAZA CAMPUS	14	10	24	LUWEERO
KISORO HALL C/O H/M MUTOLERE	14	10	24	KISORO
KOTIDO SECONDARY SCHOOL	16	8	24	KOTIDO
MUGONGO SEC SCHOOL KYENGERA	12	12	24	KAMPALA
MUNYONYO HIGH SCHOOL	13	11	24	WAKISO
NYENDO MIXED SEC SCHOOL	14	10	24	BUIKWE
ROMASA GIRLS COLLEGE	14	10	24	MUKONO

RYERU GIRLS SCHOOL	10	14	24	BUSHENYI
AMKA CLASSIC SCHOOL, KAMPALA	17	6	23	KAMPALA
BUDDE SEC SCHOOL	7	16	23	BUTAMBALA
CONCERTED COLLEGE SCH NTINDA	16	7	23	KAMPALA
FISHER BRANCH KALAGALA HS	13	10	23	KALANGALA
HORNBY HIGH SCHOOL KABALE	3	20	23	KABALE
KAKOOLA HIGH SCHOOL	13	10	23	LUWEERO
KAMPALA CITIZENS COLLEGE SCHOOL	9	14	23	KAMPALA
RUHINDA SECONDARY SCHOOL	18	5	23	MITOOMA
SAYIDINA ABUBAKAR SS	8	15	23	BUTAMBALA
ST ELIZABETH SECSCH NKOOWE	14	9	23	WAKISO
WAGWA HIGH SCHOOL	12	11	23	KALUNGU
BUKANDULA SS	17	5	22	MPIGI
BUKOTO HIGH SCHOOL	10	12	22	KAMPALA
COMBONI COLLEGE LIRA	21	1	22	LIRA
DESTINY EAGLES SS	9	13	22	MPIGI
GREENSTARS HS ENTEBBE	11	11	22	WAKISO
HAPPY HOURS SS, BWAISE	11	11	22	KAMPALA
ISINGIRO SECONDARY SCHOOL	13	9	22	ISINGIRO
KAZO HILL COL SCHOOL KAWEMPE	11	11	22	KAMPALA
KINAAWA HIGH SCHOOL KASANGATI	10	12	22	WAKISO
KINONI GIRLS' SEC SCHOOL	0	22	22	MBARARA
MARACHA SECONDARY SCHOOL	18	4	22	MARACHA
MASAKA EXODUS VOCATIONAL SS	9	13	22	MASAKA
MITYANA TRINITY COLLEGE	8	14	22	MITYANA
ST JOSEPH'S SEMINARY, NYENGA	22	0	22	BUIKWE
ST MARY'S HIGH SCHOOL, KATALE - BUNAMWAYA	10	12	22	KAMPALA
ST THEREZA GIRLS NSENYI	0	22	22	KASESE
AGA KHAN HIGH SCHOOL	14	7	21	KAMPALA
BETHEL COVENANT COLLEGE	7	14	21	WAKISO
CARDINAL NSUBUGA SS NYENGA	12	9	21	BUIKWE
DYNAMIC SECONDARY SCHOOL	11	10	21	MUKONO
EBENEZER CHRISTIAN SEC SCH	9	12	21	KAMPALA
GREENFIELDS HIGH SCHOOL IGANGA	14	7	21	IGANGA
KAARO HIGH SCHOOL	9	12	21	KIRUHURA
KASHENYI SECONDARY SCHOOL	13	8	21	RUKUNGIRI
KIIRA HIGH SCHOOL, JINJA	13	8	21	JINJA

LIGHT COLLEGE MUKONO	14	7	21	MUKONO
LIRA INTERGRATED SECSCH	11	10	21	LIRA
MATALE C/U SEC SCHOOL,KALISIZO	16	5	21	RAKAI
MBARARA ALLIED SCHOOL	14	7	21	MBARARA
ST BALIKUDEMBE SS MITALAMARIA	5	16	21	MPIGI
ST CH LWANGA GIRLS' KALUNGU	0	21	21	KALUNGU
ST CHARLES LWANGA SS, KOBOKO	21	0	21	KOBOKO
ST PAUL'S SS LWEZA	9	12	21	WAKISO
STENA HILL SCH KAMPALA	12	9	21	KAMPALA
WIGGINS SECONDARY SCHOOL KUMI	7	14	21	KUMI
BUKOMERO SECONDARY SCHOOL	10	10	20	KIBOGA
BUKULULA SECONDARY SCHOOL	1	19	20	MASAKA
CENTRAL COLLEGE SCHOOL NATEETE	9	11	20	KAMPALA
GAMATUI GIRLS' SCHOOL	2	18	20	KAPCHORWA
HIGHLAND SS KISAASI	11	9	20	KAMPALA
HOIMA HALL	12	8	20	HOIMA
MARTIN LUTHER KING COLLEGE	13	7	20	WAKISO
MT CARMEL SECONDARY SCHOOL	2	18	20	KAMPALA
MUBENDE LIGHT SS	7	13	20	MUBENDE
NDEJE DAY VACATIONAL SS	7	13	20	LUWEERO
NKOWE HIGH SCHOOL	10	10	20	WAKISO
NTANDA COLLEGE SCHOOL	12	8	20	BUTAMBALA
SACRED HEART SEM MUBENDE	11	9	20	MUBENDE
ST ANDREW KAGGWA SS, WANDEGEYA	10	10	20	KAMPALA
ST JEROME S S RUKUNGIRI	8	12	20	RUKUNGIRI
ST JOHN'S SECSCHOOL NTEBETEBE	13	7	20	WAKISO
ST PAUL'S SEMINARY KABALE	20	0	20	KABALE
BOMBO HALL C/O H/M BOMBO SS	13	6	19	LUWEERO
BUSUJU SECONDARY SCHOOL	9	10	19	MITYANA
DAYSTAR CHRISTIAN SS	14	5	19	HOIMA
ENTEBBE PARENTS SS	12	7	19	WAKISO
GOOD SAMARITAN NANSANA	7	12	19	KAMPALA
HIGHFIELD HIGH SCHOOL	9	10	19	WAKISO
JUBILEE SS KARENGA	9	10	19	KAABONG
KAKIRA SECONDARY SCHOOL	10	9	19	JINJA
KIJJABWEMI S S	12	7	19	MASAKA MC
LIRA TOWN COLLEGE	13	6	19	LIRA

LUMA EASTERN COLLEGE BUSIA	11	8	19	BUSIA
MAJORINE COLLEGE,MULAWA	13	6	19	WAKISO
MAKERERE HIGHWAY COLLEGE	11	8	19	KAMPALA
MANCHESTER HIGH SCHOOL	8	11	19	KAMPALA
MATUGGA GIRLS SS	4	15	19	WAKISO
NDEEBA SEC SCHOOL KAYUNGA	6	13	19	KAYUNGA
PERE GRANDMAISON MEM BUYEGE	8	11	19	MPIGI
SEGUKU HILL COLLEGE	7	12	19	WAKISO
SIR TITO WINYI SEC SCHOOL	14	5	19	HOIMA
ST BERNARD'S COLLEGE, KISWERA	13	6	19	MUKONO
ST GERTRUDE'S VOC GIRLS,KISORO	0	19	19	KISORO
ST JOHN'S SS, NYABWINA	11	8	19	SHEEMA
ST MARIA GORRETI SS, RUSHOROZA	6	13	19	BUSHENYI
WORDS WORTH S S KAMPALA	6	13	19	KAMPALA
BETHEL PARENT'S SS	7	11	18	KAMPALA
BISHOP NANKYAMA MEMCOL DEGEYA	11	7	18	LUWEERO
BOOMA INTERNATIONAL SCHOOL	12	6	18	MBARARA
BUWAGGA SS KASANGATI	10	8	18	WAKISO
BWIKYA SEC SCHOOL	11	7	18	HOIMA
EXCEL HIGH SCHOOL MASINDI	6	12	18	MASINDI
GABA SEC SCHOOL	11	7	18	KAMPALA
GREAT AUBREY MEMORIAL COLLEGE	10	8	18	TORORO
JOY DOMINION ACADEMY - MUSITA	1	17	18	MAYUGE
KATATUMBA ACADEMY	10	8	18	MBARARA
KITARA MOBEL SECONDARY SCHOOL	10	8	18	HOIMA
KITGUM HIGH SCHOOL	14	4	18	KITGUM
MASAKA HALL	8	10	18	MASAKA
MASESE GIRLS BOARDING SS JINJA	0	18	18	JINJA
MASUULITA SEC SCH KAKIRI	8	10	18	WAKISO
MT ST JOHN'S COLL KAGOMA	10	8	18	MUKONO
MUKITALE DEV FOUND SS	17	1	18	KAMPALA
NEW STYLES SECSCHOOL BWAISE	7	11	18	KAMPALA
PEARL HIGH SCHOOL MAKINDYE	13	5	18	KAMPALA
PILKINGTON COLLEGE MUGULUKA	8	10	18	JINJA
PROGRESSIVE S S KABEMBE	10	8	18	MUBENDE
ST CHARLES LWANGA SS, KIBIRI	13	5	18	KAMPALA
ST JOHN'S SS, NYABWINA	8	10	18	SHEEMA

ST TERESA GIRLS COL , CALCUTTTA	0	18	18	KANUNGU
WOBULENZI HIGH SCHOOL	10	8	18	LUWEERO
AIRFORCE SS ENTEBBE	8	9	17	WAKISO
BUNYA SECONDARY SCHOOL	14	3	17	MAYUGE
BUYANJA GRAMMAR SCHOOL	14	3	17	RUKUNGIRI
CITY HILL COLLEGE, MUTUNDWE	10	7	17	KAMPALA
EVEREST COLLEGE	12	5	17	LUWEERO
GRACE SECONDARY SCHOOL	9	8	17	MBALE
ITENDERO SS	12	5	17	SHEEMA
KAGGULWE S S	10	7	17	BUTAMBALA
KAPCHORWA SEC SCHOOL	15	2	17	KAPCHORWA
KASANGA SEC SCHOOL	7	10	17	IBANDA
KYAMATE SECONDARY SCHOOL	9	8	17	NTUNGAMO MC
MENDE KALEMA MEMORIAL SS	9	8	17	WAKISO
MIDFIELD SS	9	8	17	KAMPALA
MUNKUNYU SS	9	8	17	KASESE
SPIRE HIGH SCHOOL	7	10	17	WAKISO
SPRING FIELD COLLEGE KAMPALA	9	8	17	KAMPALA
SSINGO SECONDARY SCHOOL	6	11	17	KIBOGA
ST ANDREW KAGGWA SS, KASAALA	8	9	17	LUWEERO
ST CHARLES LWANGA SS BUKERERE	5	12	17	MUKONO
ST CHARLES LWANGA SS, KASASA	14	3	17	KALUNGU
THE SCIENCE FOUNDATION COLLEGE	8	9	17	WAKISO
WAKATAYI S S	13	4	17	LUWEERO
ANSWAR MUSLIM HIGH SCHOOL	8	8	16	WAKISO
BETHEL ROYAL H S NAKASONGOLA	13	3	16	NAKASONGOLA
CENTRAL COLLEGE , KABIMBIRI	8	8	16	MUKONO
CRESTED SS KAZO	12	4	16	KAMPALA
GOLDEN SCHOOL	5	11	16	ARUA
HILL VIEW COLLEGE BULANGIRA	11	5	16	KIBUKU
JANAN SS	9	7	16	LUWEERO
JINJA PROGRESSIVE ANNEX	10	6	16	JINJA
KYENJOJO SECONDARY SCHOOL	10	6	16	KYEJOJO
LIGHT SECONDARY SCHOOL,SOROTI	10	6	16	SOROTI
LUGAZI PROGRESSIVE COLLEGE	11	5	16	BUIKWE
MAY CHRISTIAN COLLEGE	9	7	16	WAKISO
MOUNT MASABA HS MBALE	7	9	16	MBALE

RWENZORI HIGH SCHOOL	8	8	16	KASESE
ST GEORGE HIGH SCHOOL WAKISO	8	8	16	WAKISO
ST JOSEPH'S COLLEGE LAYIBI	16	0	16	GULU
ST JOSEPH'S COLLEGE OMBACI	16	0	16	ARUA
ST MARGARET COLLEGE	10	6	16	KAMPALA
ST PAUL'S HIGH SCHOOL,RUSHOOKA	9	7	16	NTUNGAMO
BUSIA SECONDARY SCHOOL	10	5	15	BUSIA MC
BUTALEJJA SECONDARY SCHOOL	11	4	15	BUTALEJJA
CAMBDIRGE SECONDARY SCHOOL	8	7	15	WAKISO
CHEMWANIA HIGH SCHOOL	8	7	15	KWEEN
ENTEBBE COMPREHENSIVE HS	7	8	15	WAKISO
IQRA HIGH SCHOOL	5	10	15	KAMPALA
JAKAYZ SEC SCHOOL KABOWA	7	8	15	KAMPALA
KAMULI PROGRESSIVE COLLEGE	9	6	15	KAMULI
LIGHT COLLEGE KATIKAMU	13	2	15	LUWEERO
LUTEMBE BOARDING SS	7	8	15	WAKISO
MASINDI SECONDARY SCHOOL	12	3	15	MASINDI MC
NAGGALAMA ISLAMIC INSTITUTE	11	4	15	MUKONO
NDEJJE HIGH SCHOOL	10	5	15	LUWEERO
NSAMBYA HILLSIDE WESTERN SCHOOL	11	4	15	KAMPALA
NYONDO S S	8	7	15	MBALE
PAL AND LISA COLLEGE PALLISA	8	7	15	PALLISA
PALLISA SECONDARY SCHOOL	12	3	15	PALLISA
ROCK FOUNDATION S S NSAMBIA	8	7	15	KAMPALA
RUBAGA MIXED H/S , NATEETE	7	8	15	KAMPALA
SOROTI MUNICIPAL SEC SCHOOL	5	10	15	SOROTI
ST BRIDGET GIRLS' HIGH SCHOOL	6	9	15	MBARARA
ST JOHN'S HIGH SCHOOL MUKONO	6	9	15	MUKONO
ST STEPHEN SS, MUKONO	9	6	15	MUKONO
ST THEREZA GIRLS' SS MASINDI	0	15	15	MASINDI
ST THEREZA GIRLS' SS, MASINDI	6	9	15	MASINDI
UGANDA MARTYRS CENTENARY SS	5	10	15	KAKUMIRO
VURA SECONDARY SCHOOL	14	1	15	ARUA
AFRICA SS KAMPALA	10	4	14	KAMPALA
AGGREY MEMORIAL SEC SCHOOL	4	10	14	WAKISO
BALIBASEKA SS	7	7	14	WAKISO
BUBULO GIRLS' HIGH SCHOOL	2	12	14	MANAFWA

BUDDO COLLEGE	6	8	14	WAKISO
BUKALASA SEMINARY MASAKA	14	0	14	MASAKA
BUKINDA SEMINARY, KABALE	11	3	14	KABALE
CENTRAL COLLEGE, KAWEMPE	6	8	14	KAMPALA
CRESTED HIGH SCHOOL LUKAYA	4	10	14	KALUNGU
ENTEBBE HALL	7	7	14	WAKISO
GALAXY SECONDARY SCHOOL	9	5	14	KAMPALA
GLOBAL HARVEST SS	9	5	14	KAMPALA
GREENHILL SS, KYAMULIBWA	10	4	14	BUKOMANSIMBI
KAMPALA APOSTOLIC SS	9	5	14	KAMPALA
KASANA SS & VOCATIONAL SCHOOL	7	7	14	MUKONO
KAWEMPE STANDARD SCHOOL	8	6	14	KAMPALA
KITGUM COMPREHENSIVE COLLEGE	5	9	14	KITGUM
KYENGERA CENTRAL COLLEGE	9	5	14	WAKISO
LUGOBA HIGH SCHOOL	4	10	14	KAMPALA
LWERU S S	7	7	14	BUIKWE
MARYLAND HS, MASAJJA	6	8	14	WAKISO
MBALE PROGRESSIVE SCHOOL	8	6	14	MBALE
MBARARA ARMY BOARDING SS	8	6	14	MBARARA MC
MULAGI GIRLS S S	0	14	14	BUTALEJA
MWERERWE SEC SCHOOL	7	7	14	WAKISO
NAJJA HIGH SCHOOL	5	9	14	KAMPALA
NAMAKWA S S	2	12	14	MUKONO
NAZIGO TOWN SS	5	9	14	KAYUNGA
NYAMITANGA S S	10	4	14	MBARARA
NYENGA SECONDARY SCHOOL	8	6	14	BUIKWE
RUYONZA RIVERSIDE SEC SCHOOL	13	1	14	BUSHENYI
ST GERALD MHS	4	10	14	WAKISO
ST HENRY'S COLLEGE - NAMUGONGO	7	7	14	WAKISO
ST JOHN'S SS BUSIA	11	3	14	BUSIA
UGANGA MARTRY'S COLLEGE SSONDE	11	3	14	MUKONO
Unidentified School	10	4	14	
ADWARI SECONDARY SCHOOL	10	3	13	OTUKE
ALLIANCE STANDARD SS MENGU	7	6	13	KAMPALA
BUKERERE COLLEGE SCHOOL	10	3	13	MUKONO
CENTRAL COLLEGE , BUGIRI	12	1	13	BUIKWE
EKITANGAALA TRANSFORMATION HS	7	6	13	NAKASONGOLA

EMIRATE COLLEGE SCHOOL, KAKIRI	6	7	13	WAKISO
HALLMARK HIGH SCHOOL	13	0	13	MBARARA
K GARDEN GROOVE COLLEGE BUDDO	5	8	13	MASAKA
KABERAMAIDO SECONDARY SCHOOL	11	2	13	KABERAMAIDO
KADDUGALA S S	10	3	13	MASAKA
KAKOOGI SS NAKASONGOLA	8	5	13	NAKASONGOLA
KITAGOBWA HIGH SCHOOL	6	7	13	KAMPALA
LAKE MBURO SS	9	4	13	KIRUHURA
LUMINO HIGH SCHOOL	12	1	13	BUSIA
MASHARIKI HIGH SCHOOL	4	9	13	KAMPALA
MBARARA GIRLS SCHOOL	1	12	13	MBARARA
MILLENIUM UNIVERSAL COLLEGE	10	3	13	TORORO
MITYANA TOWN SCHOOL	3	10	13	MITYANA
MPIGI SECONDARY SCHOOL	6	7	13	LUWEERO
MUKONO TOWN ACADEMY	4	9	13	MUKONO
NAGGALAMA SENIOR SS	4	9	13	MUKONO
SEKANYONYI SS	1	12	13	MITYANA
SOROTI HALL	10	3	13	SOROTI
ST GEORGE H SCHOOL, KABUSU	5	8	13	KAMPALA
ST PETER'S COLLEGE, BUWEERA	9	4	13	JINJA
ST PIUS SS KIZIBA	9	4	13	KABALE
TOWN VIEW SECONDARY SCHOOL	6	7	13	KAPCHORWA
TRINITY SS RWASHAMAIRE	9	4	13	NTUNGAMO
ANGAL SECONDARY SCHOOL	9	3	12	NEBBI
BONI CONSILLI GIRLS	0	12	12	ISINGIRO
BUBULO SECONDARY SCHOOL	5	7	12	MANAFWA
BUZZIBWERA SS, LUWERO	4	8	12	LUWEERO
ICEME GIRLS SEC SCHOOL	0	12	12	OYAM
KARAMBI S S	9	3	12	KASESE
KAWAALA COLLEGE SCHOOL	9	3	12	KAMPALA
KYEITEMBE VICATIONAL SS	6	6	12	BUSHENYI
LUGAZI PARENT INTERNATIONAL	5	7	12	BUIKWE
LUIGI GIUSSANI HS	8	4	12	WAKISO
LUTENGO UNITED COLLEGE MUKONO	7	5	12	MUKONO
LUWERO HALL	6	6	12	LUWEERO
MALCOM X ACADEMY, KAMPALA	8	4	12	KAMPALA
MASOOLI SECONDARY SCHOOL	5	7	12	WAKISO

MERIDIAN COLLEGE, KAMPALA	9	3	12	KAMPALA
MODEL HIGH SCHOOL	5	7	12	WAKISO
MUHABURA SHINE SS	10	2	12	KAMPALA
MUNTA ROYAL COLLEGE	8	4	12	LUWEERO
NILE S S, KAWEMPE	6	6	12	KAMPALA
ST ANDREW KAGGWA SS, KASAWO	4	8	12	MUBENDE
ST JAMES EDUCATIONAL CENTRE	2	10	12	JINJA
ST JAMES SEC SCH JINJA	7	5	12	JINJA
ST JOHN'S SEC SCH MUDUUMA	6	6	12	MPIGI
ST MARY'S COLLEGE, LACOR	5	7	12	AMURU
ST PAUL SS NAKYESSANJA	2	10	12	WAKISO
ST PETER'S NKOKONJERU S S	4	8	12	BUIKWE
ST PIUS SS, KIZIBA	8	4	12	MUBENDE
ABIM SEC SCHOOL	5	6	11	ABIM
ABOKE HIGH SCHOOL	6	5	11	KOLE
AHMADIYYA MUSLIM HIGH SCHOOL	8	3	11	KAMPALA
ALPHA AND OMEGA SEC SCH	5	6	11	WAKISO
ATAPARA SECONDARY SCHOOL	11	0	11	OYAM
AVE MARIA SECONDARY SCHOOL	8	3	11	KYENJOJO
BAHATI HIGH SCHOOL	10	1	11	WAKISO
BANKHILL COLLEGE	7	4	11	WAKISO
BIGYERA SEC SCHOOL	10	1	11	IBANDA
BUGONGI SECONDARY SCHOOL	8	3	11	SHEEMA
BUSHENYI PIONEER HIGH SCHOOL	6	5	11	BUSHENYI
BUSIA FORWARD S S	9	2	11	BUSIA
BUSOLWE STUDENTS CENTRE	7	4	11	BUTALEJA
BWANGA HIGH SCHOOL	5	6	11	RUKUNGIRI
CONTINENTAL WHITE-LAND COLL BUSEGA	6	5	11	KAMPALA
ENTEBBE GIRLS SS	1	10	11	WAKISO
HAVARD COLLEGE, HOIMA	8	3	11	HOIMA
HIGHWAY COLLEGE, MAKERERE	7	4	11	KAMPALA
KALANGAALO SEC SCHOOL	6	5	11	MITYANA
KAPCHORWA PARENTS SENIOR SS	4	7	11	KAPCHORWA
KASWABULI SSS	7	4	11	NAMUTUMBA
KIHIHI HIGH SCHOOL	7	4	11	KANUNGU
KIWAWU S S	7	4	11	MITYANA
LUTEETE SECONDARY SCHOOL	5	6	11	LUWEERO

LYANTONDE S S, KASAMBYA	8	3	11	LYANTONDE
METU SECONDARY SCHOOL	5	6	11	MOYO
MITYANA HALL C/O HM MITYANA S	7	4	11	MITYANA
MWANGUZI HIGH SCHOOL	5	6	11	WAKISO
NAKASONGOLA HALL C/O DEO	5	6	11	NAKASONGOLA
OMEGA COLLEGE SCH KAMPALA	5	6	11	KAMPALA
PALLISA HIGH SCHOOL	9	2	11	PALLISA
PEACE HIGH SCHOOL, MATUGGA	5	6	11	WAKISO
PRIDE ACADEMY, KAMPALA	5	6	11	KAMPALA
QUEEN'S WAY COLLEGE, LUGAZI	6	5	11	BUIKWE
RUBONGI ARMY SECONDARY SCHOOL	6	5	11	TORORO
SOROTI COMMUNITY SS	10	1	11	SOROTI
ST ALOYSIUS COLLEGE, NYAPEA	8	3	11	PAIDAH
ST ANDREA KAAHWA SCHOOLS KOOKI	7	4	11	RAKAI
ST CATHERINE SSS BUJUUKO	6	5	11	MPIGI
ST CHARLES LWANGA SS KASASA	7	4	11	KALUNGU
ST JOHN BOSCO SEMINARY, HOIMA	7	4	11	HOIMA
ST JOHN SS WAIKITAKA	10	1	11	JINJA
ST JOHN'S SS, MUKONO	2	9	11	MUKONO
ST JOSEPH'S GIRLS' SCH, NKONI	6	5	11	BUSHENYI
ST PETERS MIXED SS,MUKONO	8	3	11	MUKONO
ST STEPHEN SS BUDONDO	7	4	11	JINJA
TOWN VIEW SEC SCHOOL, BUGIRI	4	7	11	BUGIRI
UGANDA MARTYRS CENT, KAKUMIRO	6	5	11	KIBAALE
VIENNA H/S KABOWA	7	4	11	MUKONO
VISION HIGH SCHOOL, KAWEMPE	3	8	11	KAMPALA
WELDEN SCHOOL	8	3	11	MBARARA
YY OKOT GIRLS' MEM, KITGU	2	9	11	KITGUM
AGAPE SEC SCHOOL BUSEMBATIA	7	3	10	IGANGA
AMUCA SDA SS	5	5	10	LIRA
BERKELEY SS, KAMPALA	6	4	10	KAMPALA
BEXILL HIGH SCHOOL	4	6	10	MASAKA
BIGYERA HALL	6	4	10	IBANDA
BP SISTO MAZZOLDI SS LWEZA	5	5	10	WAKISO
BRIGHT FUTURE VOC SS KAWEMPE	3	7	10	KAMPALA
BUKEDEA LIFELINE SEC SCHOOL	8	2	10	BUKEDEA
DEDE SECONDARY SCHOOL	7	3	10	NAMAYINGO

EVERLIGHT COLLEGE KALUNGU BBUNGA	7	3	10	WAKISO
IAN COLLEGE LYANTONDE	7	3	10	LYANTONDE
KAIROS HIGH SCHOOL	6	4	10	WAKISO
KAKOMA SECONDARY SCHOOL	7	3	10	RAKAI
KAMBUGA SECONDARY SCHOOL	6	4	10	KANUNGU
KANONI SS	6	4	10	KIRUHURA
KIBULI GIRLS' HIGH SCHOOL	2	8	10	KAMPALA
KING OF KINGS SS IGANGA	4	6	10	IGANGA
KIRIBAKI SECONDARY SCHOOL	7	3	10	IGANGA
KITGUM TOWN COLLEGE	7	3	10	KITGUM
LUBANI S S	9	1	10	JINJA
MMANZE SS	4	6	10	WAKISO
MUKONO COMPREHENSIVE SS	5	5	10	MUKONO
NKOMA SECONDARY SCHOOL	8	2	10	MBALE MC
PRINCES DIANA HS	3	7	10	WAKISO
SALVATION COLLEGE KAJJANSI	5	5	10	WAKISO
SESEME GIRLS' SCHOOL	0	10	10	KISORO
ST ANDREW KAGGWA SS, KASAALA	4	6	10	LUWEERO
ST ANTHONY'S SS KAYUNGA	8	2	10	MASAKA
ST BERNARD'S COLLEGE KISWERA	9	1	10	MASAKA
ST CHARLES LWANGA KITABI VOCS	10	0	10	BUSHENYI
ST FRANCIS SS BUSUNJU	6	4	10	MITYANA
ST JOHN'S SECSCH KABUWOKO	5	5	10	RAKAI
ST JOHN'S SS NYABWINA	6	4	10	SHEEMA
ST PAUL BIHARWE HIGH SCHOOL	3	7	10	MBARARA
ST PAUL'S SS, MPERERWE	5	5	10	KAMPALA
AGROLINKS ACADEMY	5	4	9	WAKISO
ALLIANCE HIGH SCHOOL, SOROTI	7	2	9	SOROTI
ALLIANCE MODEL SCHOOL KAMPALA	6	3	9	KAMPALA
ALLIED TEACHERS SS	5	4	9	BUKWO
AMURIA SECONDARY SCHOOL	4	5	9	AMURIA
BLK MUWONGE SS, KAYUNGA	6	3	9	KAYUNGA
BRIGHT FUTURE ACADEMY, BULAGA	4	5	9	WAKISO
BRIGHT TRUST SS KYENGER	2	7	9	WAKISO
BUKEDEA SECONDARY SCHOOL	9	0	9	BUKEDEA
BUMBO S S	8	1	9	LUWEERO
BUSAANA SEC SCHOOL	6	3	9	KAYUNGA

CENTRAL SCHOOL HOIMA	6	3	9	HOIMA
DARA CHRISTIAN HIGH SCHOOL	2	7	9	LIRA
EQUATORIAL COLLEGE, NAMUWONGO	4	5	9	KAMPALA
GABA MIXED HIGH SCHOOL	5	4	9	KAMPALA
GAYAZA ISLAMIC SS	5	4	9	WAKISO
GOODWILL COLLEGE SCHOOL	4	5	9	KAMPALA
GULU HALL	6	3	9	GULU
GULU HIGH SCHOOL	6	3	9	GULU MC
JJUNGO SECONDARY SCHOOL	5	4	9	WAKISO
KAGAMBA SECONDARY SCHOOL	4	5	9	NTUNGAMO
KIBULI HIGH SCHOOL	6	3	9	KAMPALA
KING JESUS COLLEGE KASESE	3	6	9	KASESE
KKAN HIGH SCHOOL BUNAMWAYA	4	5	9	KAMPALA
KYENJOJO INTERGRATED S S	8	1	9	KYEJOJO
MADDOX SS	4	5	9	KYEJOJO
MAKERERE HIGH SCHOOL	8	1	9	KAMPALA
MARANATHA HIGH SCHOOL	4	5	9	WAKISO
MPIGI HIGH SCHOOL	4	5	9	MPIGI
MUKONO HALL	5	4	9	MUKONO
NAMALERE GIRLS SS	0	9	9	WAKISO
NAMASAGALI COLLEGE	4	5	9	KAMULI
PAL AND LISA SS, KAMPALA	7	2	9	KAMPALA
RUHANGA ADVENTIST SEC SCHOOL	8	1	9	NTUNGAMO
RUKUNGIRI HIGH SCHOOL	7	2	9	RUKUNGIRI
RWANYAGWE HS MBARARA	5	4	9	MBARARA
RYAKASINGA CENTRE FOR EDUC	5	4	9	SHEEMA
SEETA SECONDARY SCHOOL	5	4	9	MUKONO
SHEEMA GIRLS SCHOOL	1	8	9	SHEEMA
ST ALOYSIUS SECSCH BWANDA	0	9	9	MASAKA
ST AUGUSTINE SS NAKIFUMA	2	7	9	MUKONO
ST GONZAGA SCHOOL BUSHENYI	6	3	9	BUSHENYI
ST JOHN BOSCO KAMULI SS	5	4	9	KAMULI
ST JOSEPH'S KIGANDO SS	4	5	9	KIBAALE
ST MARY'S MBUYE HIGH SCHOOL	5	4	9	KAMPALA
ST MATIA MULUMBA SEC SCHOOL	5	4	9	MUBENDE
VISION HIGH SCHOOL	2	7	9	KISORO
YEFE HIGH SCHOOL SEETA	4	5	9	MUKONO

ALERE REFUGEE SS, ADJUMAN	5	3	8	ADJUMANI
AMURIA HIGH SCHOOL	5	3	8	AMURIA
BUBAARE SECSCHOOL	5	3	8	KABALE
BUDUDA S S	6	2	8	BUDUDA
BUJAGA SECONDARY SCHOOL	8	0	8	MBARARA
BUJUUKO HIGH SCHOOL	4	4	8	MPIGI
BULAMU SEED SECONDARY SCHOOL	5	3	8	MPIGI
BULENGA PARENTS SEC SCHOOL	5	3	8	WAKISO
BUWAMA HIGH SCHOOL	6	2	8	MPIGI
CENTRAL HIGH SCHOOL	2	6	8	GULU
CLIVE COLLEGE KIREKA	5	3	8	WAKISO
GREEN VALLEY HIGH SCHOOL	2	6	8	KAMPALA
HIGHWAY SEC SCHOOL KIGANDA	6	2	8	KAMPALA
HUMURA SECONDARY SCHOOL	3	5	8	KYEGEGWA
IBUJE SECONDARY SCHOOL	6	2	8	APAC
ISHAKA ADVENTIST COLLEGE	4	4	8	BUSHENYI MC
KABALE HALL	5	3	8	KABALE
KABALE SECONDARY SCHOOL	6	2	8	KABALE MC
KASENGEJE SECONDARY SCHOOL	4	4	8	WAKISO
KASESE HIGH SCHOOL	3	5	8	KASESE
KASHENSHERO GIRLS' S S	5	3	8	MITOOMA
KASULE HIGH SCHOOL	4	4	8	MUKONO
KAWALA HIGH SCHOOL	2	6	8	KAMPALA
KIBOGA LIGHT COLLEGE	4	4	8	KIBOGA
KIGANDA HS	3	5	8	MUBENDE
KING JAMES COMPREHENSIVE SCHOOL	6	2	8	LIRA
KIRINYA C/U SS KIREKA	3	5	8	KANUNGU
KIROJO COLLEGE NAKASONGOLA	1	7	8	NAKASONGOLA
KOBWIN SEED SS NGORA	8	0	8	NGORA
KYABENDA SECONDARY SCHOOL	6	2	8	KAMWENGE
KYAMUHUNGA SECONDARY SCHOOL	7	1	8	BUSHENYI
MAGALE SECONDARY SCHOOL	6	2	8	MBALE
MOTHERLAND ACADEMY	3	5	8	WAKISO
NAKANYONYI S S	3	5	8	MUKONO
NAKATETE SECONDARY SCHOOL	6	2	8	LWENGO
NAKIFUMA MODERN SEC SCHOOL	6	2	8	MUKONO
NAKINYUNGUZI	3	5	8	WAKISO

NEBBI TOWN SECSCHOOL	2	6	8	NEBBI
NOMBE SEC SCHOOL	4	4	8	MBARARA
NOTREDAME HIGH SCHOOL	2	6	8	MASAKA
NYANGILIA SS	4	4	8	KOBOKO
REHABOTH INTERGRATED HS , NJERU	1	7	8	BUIKWE
RUTOOMA SECONDARY SCHOOL	6	2	8	MBARARA
ST ALOYSIUS SS NABBINGO	6	2	8	WAKISO
ST ARFFORD SS, KAMPALA	3	5	8	KAMPALA
ST JOHN'S SS, BUYAMBI	8	0	8	MITYANA
ST JOSEPH'S HS NAKIREBE	4	4	8	MPIGI
ST JOSEPH'S SS, NAMUGONGO	4	4	8	WAKISO
ST STEPHEN SS MUKONO	3	5	8	MUKONO
ST STEPHEN SSS SOROTI	4	4	8	SOROTI
TRINITY HIGH SCHOOL	3	5	8	GOMBA
VIENNA COLLEGE NAMUGONGO	3	5	8	WAKISO
ANGEL HIGH SCHOOL	5	2	7	WAKISO
APAC SEC SCHOOL	6	1	7	APAC
APOSTLES OF JESUS SEM MOROTO	7	0	7	MOROTO
BUKANDULA COLLEGE, GOMBA	2	5	7	GOMBA
BULUCHEKE SECONDARY SCHOOL	3	4	7	BUDUDA
BUSOGA SS	5	2	7	JINJA
BUWAMBO SEED SS	2	5	7	WAKISO
CORNERSTONE HS NANGABO	3	4	7	WAKISO
GOODMARK HIGH SCHOOL	4	3	7	MUKONO
HANDS OF GRACE SS	5	2	7	KITGUM
HELM SECONDARY SCHOOL, KISOGA	3	4	7	MUKONO
HILLSIDE COLLEGE, MITYANA	5	2	7	MITYANA
IGANGA HALL	5	2	7	IGANGA
KABUKUNGE MUSLIM SEC SCHOOL	4	3	7	KALUNGU
KAMPALA ISLAMIC SEC SCHOOL	5	2	7	KAMPALA
KISINGA VOCATIONAL SCHOOL	3	4	7	KASESE
KIWOKO SECONDARY	1	6	7	NAKASEKE
LAKESIDE COLLEGE	6	1	7	KAMPALA
LIRA HALL	4	3	7	LIRA
MAKINDYE PARENTS S S	3	4	7	KAMPALA
MANCHESTER S S BUGIRI	5	2	7	BUIKWE
MASAKA TOWN COLLEGE	5	2	7	MASAKA

MASINDI ARMY SS	0	7	7	MASINDI MC
MAWOGOLA H S, BUKULULA	3	4	7	SEMBABULE
MBALE PARENTS SCHOOL	5	2	7	MBALE
MBARARA CENTRAL HIGH SCHOOL	5	2	7	MBARARA
MENTOR SECONDARY SCHOOL	3	4	7	LIRA
MITYANA COLLEGE KIKUMBI	5	2	7	MITYANA
MPENJA SEC SCHOOL, MPIGI	5	2	7	MPIGI
MUKONO COLLEGE SCHOOL	4	3	7	MUKONO
MULUSSA HIGH SCHOOL	3	4	7	KALANGALA
NADDUNGA SS,NAKIFUMA	4	3	7	MUKONO
NAKULABYE HIGH SCHOOL	3	4	7	KAMPALA
NAMWEZI SEC SCHOOL	5	2	7	BUIKWE
RWENTOBO HIGH SCHOOL	5	2	7	KABALE
SIR SAMUEL BAKER SCHOOL	7	0	7	GULU
ST FRANCIS BORGIA HIGH SCHOOL	4	3	7	MUKONO
ST KIRIGWAJJO SS KARUGUZA	2	5	7	KIBAALE
ST NOAH SS, MUTARA	5	2	7	MITOOMA
ST PETERS SS BOMBO KALULE	4	3	7	LUWEERO
WESTERN COLLEGE,MBARARA	5	2	7	MBARARA
YUMBE SECONDARY SCHOOL	7	0	7	YUNBE
ARUA HALL	4	2	6	ARUA
BUDADIRI GIRLS' SECSCHOOL	1	5	6	SIRONKO
BUDAKA UNIVERSAL COLLEGE	2	4	6	BUDAKA
BULEMEZI SS, VVUMBA	2	4	6	LUWEERO
BUREBA SS	3	3	6	KABALE
BUSALAMU SEC SCHOOL	5	1	6	LUUKA
BUSWALE SEC SCHOOL	2	4	6	NAMAYINGO
BUTAARE SECONDARY SCHOOL	6	0	6	BUHWEJU
CITY STAR SEC SCHOOL KIBATSI	2	4	6	NTUNGAMO
DAVID KANYEREZI SS	2	4	6	KANUNGU
GAYAZA MIXED SECONDARY SCHOOL	5	1	6	WAKISO
GREENHILL COLLEGE	6	0	6	MUKONO
HERITAGE COLLEGE SCHOOL	2	4	6	KAMPALA
JINJA MODERN SS	6	0	6	JINJA
KAGADI ACADEMY SEC SCHOOL	5	1	6	KIBAALE
KAHINJU S S	6	0	6	KABAROLE
KAPEKA SS	3	3	6	NAKASEKE

KASAKA SECONDARY SCHOOL	2	4	6	GOMBA
KASHAKA HIGH SCHOOL	2	4	6	MBARARA
KASUBI PARENT SS	5	1	6	KAMPALA
KATUUSO COMMUNITY SEC SCHOOL	2	4	6	WAKISO
KIBUUKA MEMORIAL SCHOOL, MPIGI	5	1	6	MPIGI
KIGULU COLLEGE IGANGA	1	5	6	IGANGA
KIGUMBA HIGH SCHOOL	3	3	6	KIRYANGDONGO
KIHANGA SECONDARY SCHOOL	5	1	6	KABALE
KINGSTONE COLLEGE SCHOOL	4	2	6	KAYUNGA
KISOKO HIGH SCHOOL	3	3	6	TORORO
KOBOKO MODERN SECSCH	3	3	6	KOBOKO
LUBIRI ALL SAINTS SS	3	3	6	KAMPALA
LUMUZA HIGH SCHOOL - KITENDE	3	3	6	MPIGI
MASABA COLLEGE BUSIA	3	3	6	BUSIA
MAZOLDI COLL	2	4	6	KIRUHURA
MOLLY AND PAUL HIGH SCH KIBUYE	3	3	6	KAMPALA
MOYO SECONDARY SCHOOL	3	3	6	MOYO
NAGGULU SEED SECONDARY SCHOOL	3	3	6	WAKISO
NALUKU SECONDARY SCHOOL	4	2	6	MBALE
NALUVULE COLLEGE SCHOOL	2	4	6	KAMPALA
NAMASUMBI SECONDARY SCHOOL	2	4	6	MUKONO
NDIWULIRA MEMORIAL COLLEGE MBALWA	1	5	6	MBALE
NEW KABALE BUSEGA HIGH SCHOOL	2	4	6	MPIGI
NSERESTER VOC SS, MASAKA	5	1	6	MASAKA
RAINBOW HIGH SCHOOL BUDAKA	2	4	6	BUDAKA
RUBAYA SECONDARY SCHOOL	4	2	6	KABALE
SAAD SECONDARY SCHOOL	5	1	6	KASESE
SHANAMU BOMBO HIGH SCHOOL	4	2	6	LUWEERO
SHEEMA PREMIER SCHOOL	5	1	6	SHEEMA
ST ADOLF HIGH SCHOOL KATOOSA	4	2	6	KYENJOJO
ST ALOYSIUS SECSCH, BWANDA	0	6	6	KALUNGU
ST CHARLES LWANGA SEMINARY	6	0	6	RUKUNGIRI
ST CHARLES LWANGA SS KIBIRI	0	6	6	WAKISO
ST CHARLES SEC SCHOOL NTUNGAMU	6	0	6	NTUNGAMO
ST FRANCIS COLLEGE BULOBA	3	3	6	WAKISO
ST FRANCIS SS, BUSUNJU	3	3	6	MITYANA
ST JOSEPH'S KIGANDO SS	2	4	6	KIBAALE

ST JOSEPH'S SEMINARY NYENGA	6	0	6	BUIKWE
ST JOSEPH'S SS KAKINDU	4	2	6	MITYANA
ST JUDE VOCATIONAL SS	2	4	6	MITYANA
ST MARY'S HIGH SCHOOL LUKAYA	2	4	6	KALUNGU
ST MARY'S SEMINARY FORTPORTAL	6	0	6	KABAROLE
ST PETER'S HS HOIMA	3	3	6	HOIMA
ST PETER'S SS NYARUSHANJE	5	1	6	RUKUNGIRI
ST PHILLIP'S EQUATORIAL SS	2	4	6	MPIGI
ST STEPHENS COLLEGE KABOWA	4	2	6	MUKONO
TARGET COMMUNITY COLLEGE	4	2	6	LUWEERO
UPHILL COLLEGE , KIGOMA	2	4	6	KAMPALA
VICTORY SS, PALLISA	4	2	6	PALLISA
YOUNAN-BULAMU SS,GAYAZA	0	6	6	WAKISO
AKALO S S	3	2	5	KOLE
APALA SS	1	4	5	ALEBTONG
AWELO SECONDARY SCHOOL	4	1	5	AMOLATAR
BISHOP RUHINDI KEBISONI HS	1	4	5	RUKUNGIRI
BRIGHT HIGH SCHOOL, BUSEGA	3	2	5	KAMPALA
BUBINGA HIGH SCHOOL	3	2	5	IGANGA
BUHOBE S S	4	1	5	BUSIA
BUKUYA S S	5	0	5	MUBENDE
BUSOLWE SECONDARY SCHOOL	2	3	5	BUTALEJA
BUTAWUKA MAGEZI NTAKE SS MPIGI	1	4	5	BUTAMBALA
BUTEBO SECONDARY SCHOOL	5	0	5	PALLISA
CHESOWER SS	3	2	5	BUKWO
COUNTRYSIDE SECONDARY SCHOOL	5	0	5	JINJA
EASTERN VISION COLLEGE	4	1	5	PALLISA
EQUATOR COLLEGE LUGAZI	4	1	5	BUIKWE
FAIRMONT HIGH SCHOOL , MUKONO	2	3	5	MUKONO
FIVE STAR HIGH SCHOOL NTUNGAMO	5	0	5	NTUNGAMO
GOD'S WAY HIGH SCHOOL, MAGANJO	2	3	5	KAMPALA
GOOD SAMARITAN HS	4	1	5	KAMPALA
GRACELAND GIRLS' SS GULU	0	5	5	GULU
HERITAGE VOCATIONAL SS	4	1	5	MBARARA
IHUNGA-MUGYERA BASIN SS	3	2	5	NTUNGAMO
ITENDERO HIGH SCHOOL	3	2	5	SHEEMA
KABOJJA SEC SCHOOL	3	2	5	KAMPALA

KAMPALA CITY SCHOOL NANSANA	3	2	5	KAMPALA
KASAANA HIGH SCHOOL	4	1	5	LUWEERO
KASULE MEMORIAL H/S, MUKONO	2	3	5	MUKONO
KAWAALA COLLEGE SCHOOL	3	2	5	KAMPALA
KENT FOUNDATION COL, MBARARA	3	2	5	MBARARA
KHADIJAN GIRLS' ISLAMIC	0	5	5	GULU
KIBIBI CENTRAL COLLEGE	3	2	5	WAKISO
KING DAVID HIGH SCHOOL	1	4	5	KALUNGU
KINYARA SECONDARY SCHOOL	3	2	5	MASINDI
KITALA SSS	2	3	5	WAKISO
KIZINDA PARENTS VOCATIONAL HS	5	0	5	BUSHENYI
KYAMULIMBWA SS	1	4	5	JINJA
LOGIRI GIRLS SS	2	3	5	ARUA
MAMTAZ SS , KAWEMPE	2	3	5	KAMPALA
MARIA THEREZA LEDOCHOWSKA COLL	1	4	5	BUIKWE
MBALE HALL	2	3	5	MBALE
METU SEC SCHOOL ,KAMPALA	3	2	5	KAMPALA
MUBANDA SS	2	3	5	KAYUNGA
MUKURA SS	4	1	5	NGORA
MUTANYWANA SECONDARY SCHOOL	4	1	5	KASESE
NAKASOGA SEC SCHOOL	2	3	5	RAKAI
NAKWAYA SEC SCHOOL	3	2	5	MITYANA
NAZARETH HS	4	1	5	KAMPALA
NGAI SECONDARY SCHOOL	5	0	5	OYAM
NYABUGANDO BAPTIST VOCATIONAL SS	1	4	5	WAKISO
NYAKINONI S S	4	1	5	KANUNGU
OMBATINI SECONDARY SCHOOL	4	1	5	ARUA
RISTAKA HIGH SCHOOL-BUSIIKA	3	2	5	MBALE
SEETA COLLEGE, MUKONO	4	1	5	MUKONO
SEMULIKI HIGH SCHOOL, IZAURA	3	2	5	BUNDIBUGYO
SEVEN HILL COLLEGE, KAMPALA	3	2	5	KAMPALA
ST ANDAER COLLEGE SS NSANGI	2	3	5	WAKISO
ST ANDARD HS NYAMWAMBA	1	4	5	KASESE
ST ANDREWS SS	1	4	5	MUKONO
ST ANDREWS'S COLLAGE SCHOOL	1	4	5	MOYO
ST ANTHONY SS, NKOKONJERU	1	4	5	BUIKWE
ST CATHERINE GIRLS SCH, KAZO	0	5	5	MBARARA

ST GERLARD VOCATIONAL SS	4	1	5	MASAKA
ST HENRY'S COLLEGE, KAMPALA	3	2	5	KAMPALA
ST JOHN EVANGELIST SEMINARY	5	0	5	KASESE
ST JOSEPH'S GIRLS' SCH NKONI	1	4	5	BUSHENYI
ST JOSEPH'S SS, VILLA-MARIA	4	1	5	MASAKA
ST JOSEPH'S VOCATIONAL HS	3	2	5	NAKASONGOLA
ST JOSEPHAT SS KABAGA	0	5	5	WAKISO
ST MARY MAGDALENE SS	2	3	5	LIRA
ST MBAGA'S COLLEGE NADDANGIRA	5	0	5	WAKISO
ST NOAH SECONDARY SCH MUTARA	3	2	5	MITOOMA
ST PIUS SS, NYAMWEGABIRA	2	3	5	KANUNGU
STELLA MARIS SS, NYENDO	4	1	5	MASAKA
TAIBAH INTERNATIONAL SCHOOL	0	5	5	WAKISO
VIENNA HIGH SCHOOL MBARARA	2	3	5	MBARARA
WAITAMBOGWE SECONDARY SCHOOL	4	1	5	MAYUGE
WOBULENZI COLLEGE SCHOOL	3	2	5	LUWEERO
WOBULENZI TOWN ACADEMY	2	3	5	LUWEERO
ALLIANCE GLOBAL COLLEGE ARUA	4	0	4	ARUA
BIISO WAR MEMORIAL SS	4	0	4	BULISA
BLESSED COMBONI SS KIGUMBA	2	2	4	KIRYANDONGO
BP ANGELO NEGRI COLLEGE GULU	3	1	4	GULU
BUGEMBE ISLAMIC INSTITUTE	3	1	4	WAKISO
BUGILI SECONDARY SCHOOL	1	3	4	WAKISO
BUGOBERO HIGH SCH	2	2	4	MANAFWA
BUTIRU CHRISTIAN COMPR S S	4	0	4	KAMPALA
BUWAMBO SS	3	1	4	WAKISO
CANON NJANGALI GIRLS H/S , HOIMA	0	4	4	HOIMA
CREAMLAND HIGH SCHOOL	2	2	4	MBARARA
EAST COLLEGE SCHOOL	3	1	4	KAMPALA
EMIRATES HIGH SCHOOL	2	2	4	WAKISO
FORT/PORTAL HALL	4	0	4	KABAROLE
GLOBAL SKILLS SS, KAMPALA	1	3	4	KAMPALA
HOPE CHRISTIAN HS, LUGAZI	0	4	4	JINJA
ISHONGORORO HIGH SCHOOL	1	3	4	IBANDA
JINJA PARENTS (JIPA) COLLEGE	1	3	4	JINJA
KAKIRA HIGH SCHOOL	3	1	4	JINJA
KAMWENGE SECONDARY SCHOOL	1	3	4	KAMWENGE

KANGULUMO	1	3	4	NAMUTUMBA
KATEREMA SEC SCH TORORO	2	2	4	TORORO
KATOOKE SECONDARY SCHOOL	1	3	4	KAMPALA
KIGARAMA SEC SCHOOL	2	2	4	MITOOMA
KING FAISAL BBUYE ISLAMIC SS	3	1	4	MITYANA
KING OYO SS	1	3	4	KABAROLE
KITARA COLLEGE SCHOOL	2	2	4	HOIMA MC
KITATYA SEC SCHOOL	0	4	4	KAYUNGA
LIGHT SEC SCHOOL, KITOMA	3	1	4	MASAKA
LONDON HIGH SCHOOL , KABOWA	3	1	4	KAMPALA
LWEBITAKULI S S	2	2	4	SEMBABULE
MASAKA PARENTS S S	1	3	4	MASAKA
MBALE HIGH SCHOOL	3	1	4	MBALE
MBARARA HALL	4	0	4	MBARARA
MIDLAND HS LUWEERO CAMPUS	3	1	4	LUWEERO
MUYALLEN HIGH SCHOOL	2	2	4	KAYUNGA
MWAMBA SEC SCH, IBANDA	4	0	4	IBANDA
NAKIFUMA HIGH SCHOOL	3	1	4	MUKONO
NAMINYA HIGH SCHOOL	2	2	4	JINJA
NAMIREMBE SEC SCHOOL ,KAMPALA	3	1	4	KAMPALA
NAMUNGOONA SALAF SCHOOL	1	3	4	KAMPALA
NDEKYE SECONDARY SCHOOL	2	2	4	RUBIRIZI
NGABO ACADEMY OF SCI, MBARARA	3	1	4	MBARARA
NYAKATUKURA MEM SS IBANDA	3	1	4	IBANDA
OXFORD HIGH SCHOOL	3	1	4	MBALE
PADIBE SECONDARY SCHOOL	2	2	4	LAMWO
PAKWACH SECONDARY SCHOOL	3	1	4	NEBBI
PRAISE INTEG H/S MPERERWE	2	2	4	KAMPALA
RESTORE LEADERSHIP H/S GULU	2	2	4	GULU
RUHAAMA SS	3	1	4	NTUNGAMO
SHEEMA HS	1	3	4	SHEEMA
SIRONKO PARENTS SEC SCHOOL	1	3	4	SIRONKO
ST ADOLF TIBEYALIRWA SS KAGADI	2	2	4	KAGADI
ST ANDARD COLLEGE NTUNGA	3	1	4	NTUNGAMO
ST BENEDICTS SS, BUWAMA	4	0	4	NAKASEKE
ST CHARLES LWANGA HS,KASHEKURO	2	2	4	SHEEMA
ST ELIZABETH'S GIRLS, KIDETOK	0	4	4	SHEEMA

ST FRANCIS COLLEGE, KYANA	3	1	4	KABALE
ST FRANCIS S S, KAMOKYA	3	1	4	KAMPALA
ST GEORGE SS, MAKUKUULU	3	1	4	BUKOMANSIMBI
ST JOHN'S COMP SS, LYANTONDE	3	1	4	LYANTONDE
ST MARY'S ASSUMPTA'S SS,PAKELE	0	4	4	ADJUMANI
ST MARY'S COLLEGE NAMUGONGO	4	0	4	WAKISO
ST MUGAGGA SS, KIGANDA	2	2	4	MUBENDE
ST THEREZA SS OKUNGURO	2	2	4	BUKEDEA
TAWHEED ACADEMIC INST MAYUGE	2	2	4	MAYUGE
THE MIJJA COLL , MUDUMA BULAMU	2	2	4	KAMPALA
THE CRANES COLLEGE	3	1	4	MUKONO
UNION HIGH SCHOOL, BULENGA	0	4	4	KAMPALA
UPPER PRISON HALL, LUZIRA	4	0	4	KAMPALA
WARR GIRLS' SECONDARY SCHOOL	2	2	4	ZOMBO
ALI MAZRUI MEMORIAL VOCATIONAL SS, WAKISO	2	1	3	WAKISO
APUTI S S	1	2	3	AMOLATAR
ARINGA SS	2	1	3	YUMBE
ARMORET HIGH SCHOOL, JINJA	3	0	3	JINJA
AWERE SECONDARY SCHOOL	1	2	3	GULU
BAALE SEC SCHOOL	2	1	3	KAYUNGA
BALAWOLI S S	3	0	3	KAMULI
BIYAYA SECSCHOOL ADJUMANI	3	0	3	ADJUMANI
BP DUNSTAN NSUBUGA, KALANGALA	0	3	3	KALANGALA
BRIGHT FUTURE SS, KALIRO	1	2	3	KALIRO
BRIGHT SECONDARY SCHOOL SEETA	2	1	3	MUKONO
BUGAMBA SECONDARY SCHOOL	3	0	3	MBARARA
BUGANDA COLLEGE WAKISO	0	3	3	WAKISO
BUGUNGU S S	2	1	3	BULIISA
BUHIMBA SEC SCHOOL	3	0	3	HOIMA
BUKINDA SECONDARY SCHOOL	2	1	3	KABALE
BURANGA SECONDARY SCHOOL	2	1	3	KABALE
BUSEDE COLLEGE BUGAYA	2	1	3	JINJA
BUSIU SECONDARY SCHOOL	1	2	3	MBALE
CENTRAL COLLEGE KAMULI	1	2	3	KAMULI
FAIRLAND HIGH SCHOOL, MUKONO	3	0	3	MUKONO
FR JOHN KIGGEN MEMORIAL COLLEGE	0	3	3	SOROTI
GIANTS' COLLEGE LUWEERO	0	3	3	LUWEERO

GLOBAL H S	3	0	3	BUSHENYI
GLORYLAND CHRISTIAN COLLEGE	3	0	3	JINJA
GODCARES HIGH SCHOOL	2	1	3	WAKISO
GOMBA GLOBAL COLLEGE	3	0	3	MPIGI
GREEN LIGHT ISLAMIC SS	2	1	3	KAMPALA
GULU COLLEGE	1	2	3	GULU
HIGH SCHOOL, NANSANA	1	2	3	KAMPALA
IGANGA ACADEMIC CENTRE	2	1	3	IGANGA
IGANGA TOWN VIEW SENIOR SS	1	2	3	IGANGA
IJUMO PROGRESSIVE SEC SCHOOL	1	2	3	BUSHENYI
JOVENS HIGH SCHOOL ENTEBBE	3	0	3	WAKISO
KAABONG SS	3	0	3	KAABONG
KABANYOLO HIGH SCHOOL	2	1	3	KABAROLE
KAGONGO PARENTS SCHOOL	3	0	3	IBANDA
KAGONGO SEC SCH	3	0	3	IBANDA
KAMULI COLLEGE	3	0	3	KAMULI
KANGAI S S	3	0	3	DOKOLO
KASAWO ISLAMIC INSTITUTE	1	2	3	MUKONO
KASENGE GREEN HILL SEC SCHOOL	1	2	3	WAKISO
KASHONGI HIGH SCHOOL	1	2	3	KIRUHURA
KATAKWI HIGH SCHOOL	1	2	3	KATAKWI
KATEERA TRUST SECONDARY SCHOOL	1	2	3	KIBOGA
KAWEMPE ROYAL COLLEGE, BULAGA	1	2	3	KAMPALA
KAYABWE HIGH SCHOOL	2	1	3	MPIGI
KAYUNGA S S	3	0	3	KAYUNGA
KIDERA SECONDARY SCHOOL	2	1	3	BUYENDE
KIGATA HIGH SCHOOL	3	0	3	KABALE
KIKUNGWE SS	0	3	3	MASAKA
KINAWATAKA BETTER FUTURE SS	1	2	3	WAKISO
KITHENDE COL SCHOOL, KAMPALA	2	1	3	KAMPALA
KIYUNGA SECONDARY SCHOOL	1	2	3	LUUKA
KURUHE HIGH SCHOOL	2	1	3	KASESE
LACOR SEMINARY, GULU	3	0	3	GULU
LIGHT SS, NYABUBARE	1	2	3	BUSHENYI
LIRA PALWO SECONDARY SCHOOL	2	1	3	LIRA
LORO SECONDARY SCHOOL	2	1	3	OYAM
LUWEERO LIGHT OF LIFE SEC SCHOOL	3	0	3	LUWEERO

MARACHA HALL	0	3	3	MARACHA
MASINDI HIGH SCHOOL	3	0	3	MASINDI
MATUUMU SS	3	0	3	KAMULI
MBARARA COLLEGE	1	2	3	MBARARA
MBULIRE SEC SCHOOL	3	0	3	BUKOMANSIMBI
MODERN SS MBIRIZI	1	2	3	LWENGO
MURIISA SEC SCHOOL	3	0	3	NTUNGAMO MC
NAIGANA SECONDARY SCHOOL	3	0	3	WAKISO
NYAKISHOJWA SECONDARY SCHOOL	2	1	3	MITOOMA
NYAKIYUMBU SS	0	3	3	KASESE
NYARUKIIKA HIGH SCHOOL	2	1	3	IBANDA
OLILA HIGH SCHOOL	3	0	3	SOROTI
OLYMPIO HIGH SCHOOL	2	1	3	WAKISO
ORIAJINI S S	1	2	3	ARUA
OTRAVU SEC SCHOOL	1	2	3	MARACHA
PAJULE SECONDARY SCHOOL	1	2	3	PADER
PAKADHA SEED SECONDARY SCHOOL	2	1	3	ZOMBO
POKOT SECONDARY SCHOOL	2	1	3	AMUDAT
POPE JOHN PAUL II MEMORIAL COLLEGE	3	0	3	GULU
POPE PAUL VI SS ,ANAKA	2	1	3	NWOYA
REAL COLLEGE, BUSUNJU	2	1	3	MITYANA
RHEMA HIGH SCHOOL	2	1	3	SOROTI
RUBAARE FOUNDATION COLLEGE	3	0	3	NTUNGAMO
RUKONI SECONDARY SCHOOL	3	0	3	NTUNGAMO
RWASHAMAIRE HIGH SCHOOL	3	0	3	NTUNGAMO
RWENTOJO SS	2	1	3	MBARARA
SSEMBABULE SEC SCHOOL	1	2	3	SEMBABULE
ST MARY'S H S MUKOKO	1	2	3	MUKONO
ST ADOLF HIGH SCHOOL KATOOSA	2	1	3	KYENJOJO
ST ANDREW'S ACADEMY ,KISORO	0	3	3	KISORO
ST BENEDICT HIGH SCHOOL	1	2	3	TORORO
ST CHARLES LWANGA MUKONO	3	0	3	MUKONO
ST CLEMENT NKONI SS	2	1	3	LWENGO
ST EDWARDS'S COLLEGE GALAMBA	1	2	3	WAKISO
ST FRANCIS SEC SCH, MENGO	3	0	3	KAMPALA
ST JOHN MARY MUZEYI BIGADA SS	3	0	3	KASESE
ST MARGARET MARY MUHORRO GIRLS	0	3	3	KIBAALE

ST MARY'S HIGH SCHOOL MIGADDE	2	1	3	KANUNGU
ST MARY'S HIGH SCHOOL, KAMPALA	2	1	3	KAMPALA
ST PETER AND PAUL SEMINARY ARUA	3	0	3	ARUA
ST PETER'S SS, KATUKURU	1	2	3	MBARARA
TANA MEMORIAL HS TORORO	0	3	3	TORORO
TEMPLE HIGH SCHOOL	3	0	3	WAKISO
TIMBITWIRE GIRLS' SCHOOL	0	3	3	KASESE
TORORO PROGRESSIVE SEC SC	1	2	3	TORORO
TORORO UNIVERSAL COLLEGE	2	1	3	TORORO
UNIVERSAL SS, NYABUSHOZI	3	0	3	MBARARA
WAMALA HIGH SCHOOL	2	1	3	MITYANA
WEST VILLE	2	1	3	
ADJUMANI SECONDARY SCHOOL	1	1	2	ADJUMANI
AMOLATAR SECONDARY SCHOOL	2	0	2	AMOLATAR
ANKOLE HILL SCHOOL	0	2	2	MBARARA
ARCHBP FLYNN SECONDARY SCHOOL	1	1	2	GULU
ARUA ACADEMY	2	0	2	ARUA
ARUA SECONDARY SCHOOL	2	0	2	ARUA MC
ASINGE SECONDARY SCHOOL	0	2	2	TORORO
BAPTIST HIGH SCHOOL, KITETIKA	2	0	2	KAMPALA
BERBRA HILL SS BUSIIKA	1	1	2	NAMUTUMBA
BUHARA SS	1	1	2	KABALE
BUHUGU SECONDARY SCHOOL	2	0	2	SIRONKO
BUSIIKA MUSLIM SENIOR SS	0	2	2	NAMUTUMBA
BUSIIRO SS	2	0	2	WAKISO
BUSIRO MODERN ACADEMY	1	1	2	WAKISO
BUWESSWA SEED SS	2	0	2	MANAFWA
BUYIMBAZI SECONDARY SCHOOL	0	2	2	KIBOGA
BUZAYA SECONDARY SCHOOL	2	0	2	KAMULI
BWANGA S S	2	0	2	RUKUNGIRI
CENTRAL COLLEGE KAWEMPE	2	0	2	KAMPALA
CREAMLAND SS, MBARARA	0	2	2	MBARARA
CRESCENT HIGH SCHOOL, KAMPALA	1	1	2	KAMPALA
DEVINE HIGH SCHOOL PERERWE	1	1	2	KAMPALA
ENTEBBE KINGS' SSS	0	2	2	WAKISO
FORTUNE SS	1	1	2	KAMPALA
FRIENDS ACADEMY KATENDE	0	2	2	MPIGI

GIRLS' SCHOOL, JINJA	1	1	2	JINJA
GREENHILL SS, BUGIRI	2	0	2	JINJA
GREENVINE COLLEGE KAYUNGA	2	0	2	KAYUNGA
GULU SECONDARY SCHOOL	2	0	2	GULU MC
HEREIGNS SS MALABA	1	1	2	BUSIA
HIGH STANDARD SS KATERA	1	1	2	RAKAI
HILL TOP HIGH SCHOOL , HOIMA	1	1	2	HOIMA
HILLSIDE SS, KYANDUL	2	0	2	KAMPALA
HILLSIDE VOC SCH MAREMBO	1	1	2	KAMWENGE
HOPEFUL FUTURE SS KAYUNGA	0	2	2	KAYUNGA
IBANDA PROGRESSIVE SS	0	2	2	IBANDA
IKWERA GIRLS' SEC SCHOOL	0	2	2	APAC
IMMACULATE SEC SCHOOL, KAMPALA	0	2	2	KAMPALA
JOY SS MBALE	0	2	2	MBALE
KABAROLE ADVENTIST SS	1	1	2	KABAROLE
KABATSI HIGH SCHOOL	1	1	2	
KABUNGO SEC SCHOOL	0	2	2	KALUNGU
KAGADI SS	2	0	2	KIBAALE
KAKUNGUBE SEC SCHOOL	2	0	2	MUBENDE
KALAMBA HILL SS	2	0	2	MITYANA
KALIRO COLLEGE SEC SCHOOL	0	2	2	KALIRO
KAMPALA GRAMMAR SCHOOL	2	0	2	KAMPALA
KAMULI GIRLS COLLEGE	0	2	2	KAMULI
KASANGOMBE SECONDARY SCHOOL	1	1	2	NAKASEKE
KASEREM SEC SCHOOL	2	0	2	KAPCHORWA
KASHARI SECONDARY SCHOOL	1	1	2	MBARARA
KIBINGO GIRLS SEC SCHOOL	0	2	2	SHEEMA
KIRYASSAACA SEC SCHOOL	0	2	2	BUKOMANSIMBI
KISORO COMPREHENSIVE SSS	2	0	2	KISORO
KITENGA SEC SCHOOL, MUBENDE	2	0	2	MUBENDE
KKOME SEED SECONDARY SCHOOL	2	0	2	MUKONO
KOCH GOMA SEC SCHOOL	1	1	2	NWOYA
KYABAZINGA COLLEGE	2	0	2	KAMULI
KYAGAMBIDDWA SS	1	1	2	KALUNGU
LEO ATUBO SEC SCHOOL, LIRA	2	0	2	LIRA
LOHANA HIGH SCHOOL	0	2	2	KAMPALA
LUGAZI COMMUNITY COMPREHENSIVE	2	0	2	BUIKWE

LUGAZI HIGH SCHOOL	2	0	2	BUIKWE
LUGAZI PROGRESSIVE S,S,	0	2	2	BUIKWE
LUGOBA SENIOR SCHOOL	1	1	2	KAMPALA
LWANDA HIGH SCHOOL	2	0	2	JINJA
MANHATTAN SS, KIYUNGA MUKONO	2	0	2	MUKONO
MATETE COLLEGE SCHOOL	1	1	2	SEMBABULE
MATETE COMPREHENSIVE SEED SS	1	1	2	SEMBABULE
MBOGO SEC SCHOOL ,KAMPALA	2	0	2	KAMPALA
MIREMBE COLLEGE SCHOOL	1	1	2	KAMPALA
MOYO HALL C/O DEO MOYO	2	0	2	MOYO
MPIGI BUKANDULA SS	2	0	2	MPIGI
MUBENDE ARMY SEC SCHOOL	1	1	2	MUBENDE
NAJJA MARY'S HS, KYAGGWE	1	1	2	KAMPALA
NAKIRUNGU SS	2	0	2	SIRONKO
NAM HIGH SCHOOL PAKWACH	2	0	2	PAKWACH
NEBBI TOWN HALL	2	0	2	NEBBI
NGANDO SS	2	0	2	BUTAMBALA
NGARAMA S S	0	2	2	ISINGIRO
NGOGWE BASKERVILLE SEC SCHOOL	2	0	2	MUKONO
NGOMA SS	0	2	2	NAKASEKE
NJERU SECONDARY SCHOOL	2	0	2	BUIKWE
NORTHROAD SS NAJANAKUMBI	0	2	2	WAKISO
NTINDA VIEW COLLEGE LUGAZI CAMPUS	0	2	2	KAMPALA
NYAKABUGO GIRLS' SEC SCH	0	2	2	KANUNGU
OLD KAMPALA HIGH SCHOOL	2	0	2	KAMPALA
PADER TOWN HALL LAGWAI SEED SS	1	1	2	PADER
PANORAMA SS, MUKONO	1	1	2	MUKONO
PREMER HIGH SCHOOL	2	0	2	JINJA
PUBLIC TRUST HS	0	2	2	WAKISO
R'S SECONDARY SCHOOL, LUGAZI	1	1	2	BUIKWE
RISAH STANDARD HIGH SCHOOL	1	1	2	BUIKWE
RUBAARE SECONDARY SCHOOL	1	1	2	NTUNGAMO
RWEIBAARE SECONDARY SCHOOL	2	0	2	SHEEMA
SAM'S PARK HIGH, SCHOOL	0	2	2	KAMPALA
SAVIOUR HIGH SCHOOL	0	2	2	KIBOGA
SEDES SAPIENTIAE ACADEMIAE SS	2	0	2	RUKUNGIRI
SERERE SECONDARY SCHOOL	0	2	2	SERERE

SHEEMA PREMIER SCHOOL	2	0	2	SHEEMA
SHUHADAE ISLAMIC SCH MBARARA	1	1	2	MBARARA
SIGULU S S	1	1	2	KAPCHORWA
SIR APOLLO KAGGWA SS MUKONO	1	1	2	MUKONO
SOROTI CENTRAL SEC SCHOOL	2	0	2	SOROTI
ST AGATHA'S SS, KABALE	1	1	2	KABALE
ST ANDARD HIGH SCHOOL, NDEJE	1	1	2	LUWEERO
ST ANDREW'S SS RUBANDA	1	1	2	KABALE
ST ANDREW'S SS, RUBINDI	1	1	2	MBARARA
ST ANNE'S SS, KIHANI-IBANDA	2	0	2	IBANDA
ST BERNADETTE SCHOOL	0	2	2	JINJA
ST CHARLES LWANGA SS, KAMPALA	2	0	2	KAMPALA
ST CHARLES LWANGA, KALONGO	1	1	2	AGAGO
ST CLARE GIRLS HS, PALLISA	0	2	2	PALLISA
ST ELIZABETH GIRLS SS MITYA	0	2	2	MITYANA
ST ELLA MARIS SS NYENDO	0	2	2	MASAKA
ST FRANCIS BUHUNGA HIGH SCHOOL	0	2	2	RUKUNGIRI
ST GEORGE SS, MAKUKUULU	1	1	2	BUKOMANSIMBI
ST GONZAGA KAGOMA	2	0	2	JINJA
ST GONZAGA KAGOMA	2	0	2	JINJA
ST JOHN BOSCO, DOKOLO SEC SC	1	1	2	DOKOLO
ST JOHN'S SECSCH, KABUWOK	1	1	2	RAKAI
ST JOSEPH'S SS, VILLA-MARIA	1	1	2	MASAKA
ST JUDE'S SS, KATENDE	2	0	2	MPIGI
ST LAWRENCE HIGH SCHOOL	1	1	2	KAMPALA
ST MARTIN SS, JJANYA	1	1	2	MPIGI
ST MARY'S SENIOR SS	2	0	2	KABAROLE
ST MAURICE S S LWAGGULWE	1	1	2	MASAKA
ST PAUL'S VOCSS BUYANJA	1	1	2	RUKUNGIRI
ST PETER'S SS BWERA	1	1	2	KASESE
ST PETER'S SS, NAMWENDWA	2	0	2	KAMULI
ST PHILIPS SS,LWANGOSIA	1	1	2	BUGIRI
ST STEPHEN'S S S, BWEYOGERERE	0	2	2	WAKISO
ST THADDEUS HIGH SCH JINJA	1	1	2	JINJA
TOWNSIDE HIGH SCHOOL	2	0	2	LIRA
TUNYI S S	2	0	2	BULAMBULI
TURKISH LIGHT SECONDARY SCHOOL	2	0	2	KAMPALA

UGANDA MARTYRS HS, KIBOGA	2	0	2	KIBOGA
WAKISO SS FOR THE DEAF	2	0	2	WAKISO
WAMPEWO SEC SCHOOL ,KAMPALA	2	0	2	KAMPALA
ZAAKE SS	2	0	2	RAKAI
ABUBAKAR SWIDIQ SS	1	0	1	KAMPALA
ACULBANYA SECONDARY SCHOOL	0	1	1	KOLE
AFRICANA HIGH SCHOOL, KIBIRI	1	0	1	KAMPALA
AKII BUA COMP SS	1	0	1	ALEBTONG
ALLIANCE VICTORY SS, BUGIRI	0	1	1	BUGIRI
AMUS COLLEGE SCHOOL	1	0	1	BUKEDEA
ARCHBISHOP BAKYENGA VOC SS	1	0	1	MBARARA
ARMY S S	1	0	1	ARUA MC
ASAMU MODEL SECONDARY SCHOOL	1	0	1	KASESE
AYER SEED SS	1	0	1	KOLE
BANDA SS BUGIRI	0	1	1	NAMAYINGO
BATA SECONDARY SCHOOL	0	1	1	DOKOLO
BILAL SEC SCHOOL ,KAMPALA	1	0	1	KAMPALA
BISHOP ASILI SS, MOYO	1	0	1	MOYO
BLESSED PARENTS AND VOC SS	1	0	1	RUKUNGIRI
BOOMA HIGH SCHOOL, MBARARA	1	0	1	MBARARA
BRIDGES COLLEGE ZANA	1	0	1	WAKISO
BRIGHT FUTURE H/S KIHIFI	0	1	1	KANUNGU
BUBUTU SECONDARY SCHOOL	0	1	1	MANAFWA
BUGALO COLLEGE BWIRYA BUTALEJA	0	1	1	BUTALEJA
BUGEMA COMPREHENSIVE SS MBALE	0	1	1	WAKISO
BUGUNZU SEED SECONDARY SCHOOL	1	0	1	SIRONKO
BUKONTE SEED SECONDARY SCHOOL	1	0	1	NAMUTUMBA
BULAMBULI MBALE SS	1	0	1	MBALE
BUMASIFA SEED SECONDARY SCHOOL	1	0	1	SIRONKO
BUNGUNGU SS	1	0	1	KIRYANDONGO
BUSAALE SS	0	1	1	KAMPALA
BUSEMBATIA SECONDARY SCHOOL	1	0	1	IGANGA
BUSHENYI NTARE SCHOOL	1	0	1	BUSHENYI
BUWENGE MODERN SS	0	1	1	JINJA
BWALA SECONDARY SCHOOL	1	0	1	KAYUNGA
CHAHI SEED SS	1	0	1	KISORO
CHAWANTE SECONDARY SCHOOL	1	0	1	APAC

COMPREHENSIVE HIGH SCH BAJJA	1	0	1	KALUNGU
EAST HIGH SCHOOL KAMPALA	1	0	1	KAMPALA
EAST SS, BUYALA - JINJA	0	1	1	JINJA
EBENEZER PROGRESSIVE SS LUMINO	1	0	1	BUSIA
ELGON HIGH SCHOOL, MBALE	1	0	1	MBALE
ERUSSI SECONDARY SCHOOL	0	1	1	NEBBI
EURO BRIGHT HIGH SCHOOL	0	1	1	MUKONO
EXCEL HIGH, KABALE	1	0	1	KABALE
EZRA MEMORIAL SS	1	0	1	KIBUKU
GETWISE SEC SCHOOL, LUGAZI	0	1	1	BUIKWE
GREEN HILL COLLEGE BULOPA	1	0	1	KAMULI
GULU ARMY SECONDARY SCHOOL	1	0	1	GULU MC
HALL C/O DEO	1	0	1	
HAPUUYO SEED SS	0	1	1	KYEGEGWA
HIBISCUS HIGH SCHOOL	0	1	1	MBARARA
HIGHWAY SS SIRONKO	1	0	1	SIRONKO
HOLY FAMILY NAZARETH KYOTERA	0	1	1	RAKAI
HOMELAND COLLEGE	0	1	1	BUIKWE
HOMETEK HIGH SCHOOL SOROTI	0	1	1	SOROTI
HOPE COMMUNITY H/S	0	1	1	JINJA
IGANGA COMPREHENSIVE	0	1	1	IGANGA
IGANGA DYNAMIC SS	1	0	1	IGANGA
IGANGA SECONDARY SCHOOL	0	1	1	IGANGA
IKI-IKI SEC SCHOOL, PALLISA	0	1	1	BUDAKA
IRYARUVUMBA HIGH SCHOOL	1	0	1	KISORO
KABALE KASUBI SS	1	0	1	KABALE
KABAROLE DIPLOMA	0	1	1	KABAROLE
KABAROLE MATURE	1	0	1	KABAROLE
KABUYANDA HALL	1	0	1	ISINGIRO
KABWANGASI S S	1	0	1	PALLISA
KABWOHE SECONDARY SCHOOL	0	1	1	SHEEMA
KAKANJU VOCATIONAL SCHOOL	1	0	1	BUSHENYI
KALAKI SECONDARY SCHOOL	0	1	1	KABERAMAIDO
KALOKE CHRISTIAN HIGH SCHOOL	1	0	1	NAKASEKE
KALONGO SEED SS, NAKASONGOLA	1	0	1	NAKASONGOLA
KAMOD SECONDARY SCHOOL	1	0	1	SERERE
KAMPALA DIPLOMA	0	1	1	KAMPALA

KAMPALA KASUBI SS	1	0	1	KAMPALA
KAMUGE HIGH SCHOOL	1	0	1	PALLISA
KAMULI LUGAZI MIXED SEC SCH	1	0	1	KAMULI
KAMURONKO SEC SCHOOL	0	1	1	KABALE
KAMWEZI HIGH SCHOOL	1	0	1	KABALE
KANGULUMIRA PUBLIC SEC SCHOOL	1	0	1	KAYUNGA
KANSANGA SEED SS	1	0	1	KAMPALA
KANYABWANGA SEC SCHOOL	0	1	1	MITOOMA
KASANA TOWN ACADEMY	0	1	1	MUKONO
KASESE HALL	1	0	1	KASESE
KASSANDA SEC SCHOOL	1	0	1	MUBENDE
KATURIKA S S	1	0	1	RUKUNGIRI
KAWAALA SECONDARY SCHOOL	0	1	1	KAMPALA
KAWEMPE SS	1	0	1	KAMPALA
KEYO S S	0	1	1	AMURU
KHAOIFA GIRLS' ISLAMIC	0	1	1	
KIBAALE SECONDARY SCHOOL	0	1	1	RAKAI
KIBOGA KASUBI SS	1	0	1	KIBOGA
KIIRA VIEW SEC SCHOOL, BUWENGE	1	0	1	JINJA
KIMULI SS KYOTERA	1	0	1	RAKAI
KISIITA SEED SECONDARY SCHOOL	1	0	1	KIBAALE
KISORO HS	1	0	1	KISORO
KISYORO S SCHOOL	0	1	1	ISINGIRO
KITGUM HALL	0	1	1	KITGUM
KITGUM MATIDI SEED SS	0	1	1	KITGUM
KIZIRANFUMBI SEC SCH HOIMA	1	0	1	HOIMA
KURU SECONDARY SCHOOL	1	0	1	YUMBE
KYABUGIMBI SECONDARY SCHOOL	1	0	1	BUSHENYI
KYAMOOGO COLLEGE SCHOOL	1	0	1	KAMPALA
KYANGYENYI S S	1	0	1	SHEEMA
KYEZIMBIRE SS	0	1	1	ISINGIRO
LAKE BUNYONYI SS	1	0	1	KABALE
LAKI HIGH SCHOOL,BUJAGA	0	1	1	MBARARA
LONDON IMAGE H/S KANUNGU	1	0	1	KANUNGU
LUGAZI SEC SCH SCH ,KAFPALA	0	1	1	BUIKWE
LUNYO HILL SS	1	0	1	BUSIA
LUTENGO SS	1	0	1	KALUNGU

LUUTU MEMORIAL COLLEGE	1	0	1	MUBENDE
LUWEERO NAMIREMBE HILLSIDE SS	0	1	1	LUWEERO
LUZINGA SS	1	0	1	KAMULI
MADUDU S S	1	0	1	MUBENDE
MAKERERE COMPETENT HS	1	0	1	KAMPALA
MALONGO SECONDARY SCHOOL	1	0	1	LWENGO
MASAKA ACADEMY	0	1	1	MASAKA
MASINDI ACADEMY	1	0	1	MASINDI
MBALE MODERN SS	1	0	1	MBALE
MBALE RIVERSIDE SS	0	1	1	MBALE
MBARARA DIPLOMA	1	0	1	MBARARA
MBARARA ST CECILIA GIRLS SS	0	1	1	MBARARA
MIGADDE SS BOMBO	0	1	1	LUWEERO
MILLENIUM COLLEGE BUTANZA	0	1	1	KOBOKO
MISANVU SECONDARY SCHOOL	0	1	1	BUKOMANSIMBI
MODERN SEC SCH, KAMPALA	1	0	1	KAMPALA
MONSIGNOR BALA SECSC PAKELE	1	0	1	ADJUMANI
MORULEM GIRLS' SEC SCHOOL	0	1	1	ABIM
MPIGI MAKERERE COLLEGE SCHOOL	1	0	1	MPIGI
MUSTARD SEED SS	1	0	1	KAMPALA
NABINGOOLA PUBLIC SS	1	0	1	MUBENDE
NABISWA SS	1	0	1	KIBUKU
NAKALAMA SECONDARY SCHOOL	1	0	1	IGANGA
NAKASONGOLA KAWAALA COLLEGE SCHOOL	1	0	1	NAKASONGOLA
NAKASONGOLA MATURE	1	0	1	NAKASONGOLA
NAKIFUMA MODERN SS	1	0	1	MUKONO
NAKIGO SECONDARY SCHOOL	0	1	1	IGANGA
NAKYENYI S S	0	1	1	LWENGO
NAMBYESO AGRO SS	1	0	1	APAC
NAMPUNGE COMMUNITY HIGH SCH	0	1	1	WAKISO
NAMUGANGA SS	1	0	1	MUKONO
NAMUGOONA SS, KAMPALA	1	0	1	KAMPALA
NANZIGA PARENTS SS	1	0	1	WAKISO
NDAGWE SS	1	0	1	LWENGO
NDORWA SEC SCHOOL	1	0	1	KABALE MC
NGORA GIRLS SS	0	1	1	NGORA
NIBRAS ISLAMIC SS	1	0	1	KAMPALA

NILE COLLEGE, KASANGATI	0	1	1	WAKISO
NILE HIGH SCHOOL, ARUA	1	0	1	ARUA
NKINGA S S	1	0	1	MITOOMA
NYABITETE COLLEGE	1	0	1	RUKUNGIRI
NYAKYERA SS	0	1	1	NTUNGAMO
NYERO ROCK SECONDARY SCHOOL	1	0	1	KUMI
OBOKO HALL C/O ST CHARLES	1	0	1	YUMBE
OKWANG SECONDARY SCHOOL	1	0	1	ALEBTONG
OURLADY OF GOOD COUNSEL	0	1	1	WAKISO
OURLADY SEC SCHOOL ,KAMPALA	0	1	1	KAMPALA
OXFORD SS IBANDA	1	0	1	IBANDA
PAFRA BULAMU SS, KAMPALA	1	0	1	KAMPALA
PALLISA COMMUNITY SS	1	0	1	PALLISA
PAUL'S COLLEGE, MBALE	1	0	1	MBALE
RAHMAH MUSLIM H/S , MAKINDYE	1	0	1	KAMPALA
RAKAI KASUBI SS	1	0	1	RAKAI
RESILIENT HIGH SCHOOL	0	1	1	MBALE
REV JABULONI ISOKE MEMORIAL	0	1	1	KITGUM
ROYAL ACADEMY SCHOOL, LIRA	1	0	1	LIRA
ROYAL COLLEGE, BUNGA	0	1	1	KAMPALA
RUBONA S S	1	0	1	KABAROLE
RWAMPALA SS	1	0	1	MBARARA
RWIMI SECONDARY SCHOOL	1	0	1	KABAROLE
SACRED HEART NAJJA SSS	0	1	1	BUIKWE
SERERE TOWNSHIP S S	0	1	1	SERERE
SEROMA CHRISTIAN HIGH SCHOOL	0	1	1	MUKONO
SOROTI DIPLOMA	0	1	1	SOROTI
ST ANTONIO ORTHODOX S S MONDE	1	0	1	KAMPALA
ST ALBERT S S, KAKINDO	0	1	1	KIBAALE
ST ANDARD COLLEGE BUGIRI	1	0	1	BUIKWE
ST ANDARD HS, MBARARA	1	0	1	MBARARA
ST ANDREW'S MATALE SS	1	0	1	RAKAI
ST BALIKUDEMBE SS MITALA	1	0	1	KALUNGU
ST BENEDICTS SS BUWAMA	1	0	1	MPIGI
ST BERNABAS SS, KARUJANGA	1	0	1	KABALE
ST CHARLES SEC SCHOOL NTUNGAMU	1	0	1	NTUNGAMO
ST CHARLES SS, KASANGA	1	0	1	KAMPALA

ST ELIZA SECONDARY SCHOOL	1	0	1	ISINGIRO
ST FRANCIS HS, NAMAGOMA	0	1	1	MASAKA
ST FRANCIS SS THE BLIND SOROTI	1	0	1	SOROTI MC
ST HENRY'S COLLEGE, MAYUGE	1	0	1	MAYUGE
ST JOHN BOSCO KAMULI SS	1	0	1	KAMULI
ST JOHN BOSCO SEMINARY HOIMA	1	0	1	HOIMA
ST JOHN BOSCO, DOKOLO SEC SC	1	0	1	DOKOLO
ST JOHN S S, RUTSYA	0	1	1	ISINGIRO
ST JONAH HS NAMUGONGO	0	1	1	WAKISO
ST JOSEPH MARY'S SS MBIRIZI	0	1	1	MASAKA
ST JOSEPH TECHSEC, KITENDE	1	0	1	WAKISO
ST JOSEPH'S SS	1	0	1	BUKWO
ST JOSEPH'S SEMINARY, ABOKE	1	0	1	KOLE
ST JOSEPH'S SS, KKONGE	0	1	1	KAMPALA
ST JOSEPH'S SS, VVUMBA	1	0	1	KYANKWANZI
ST MARY'S SS KITENDE	0	1	1	WAKISO
ST MARY'S COLLEGE BUWENGE	1	0	1	JINJA
ST MARY'S SIMBYA SEC SCHOOL	1	0	1	MPIGI
ST MATIA MULUMBA SEC SCHOOL	1	0	1	MUBENDE
ST MICHAEL HIGH SCHOOL RUGAZI	0	1	1	RUBIRIZI
ST MUGAGGA SS, KIGANDA	1	0	1	MUBENDE
ST PAUL CITIZEN'S HS, KALUKUNGU	0	1	1	KALUNGU
ST PAUL'S SS KAGONGI	1	0	1	MBARARA
ST PAUL'S SS, MBULAMUTI	1	0	1	KAMULI
ST PETER'S SS ACOWA	0	1	1	AMURIA
ST PETERS SS AMUSALA	1	0	1	MASAKA
ST RAPHAEL'S SS, KABIRA	1	0	1	RAKAI
ST ROZA COLLEGE SCHOOL MATUGGA	0	1	1	WAKISO
ST THERESA SS BULOBA KASERO	1	0	1	WAKISO
ST THOMAS MBALE	1	0	1	MBALE
ST VICTOR'S SS, KITAASA	1	0	1	BUKOMANSIMBI
THE ROYALE OASIS COLLEGE	0	1	1	KAMPALA
TOROMA SECONDARY SCHOOL	1	0	1	KATAKWI
TORORO HIGH SCHOOL	0	1	1	TORORO
TORORO MODERN SS	0	1	1	TORORO
TRINITY HIGH SCHOOL ,MASAJJA	1	0	1	KAMPALA
TROPICA SS BWIZIBWERA	0	1	1	MBARARA

URDT GIRLS SECONDARY SCHOOL	0	1	1	KAGADI
USHINDI SCHOOL	1	0	1	KAMPALA
VICTORIA MODEL SS	0	1	1	LUWEERO
WAKISO KASUBI SS	1	0	1	WAKISO
WAKISO LUZIRA SSS	0	1	1	WAKISO
WAKISO NKUMBA SSS	1	0	1	WAKISO
WEKOMIIRE SECONDARY SCHOOL	1	0	1	KYEGEGWA
YIVU SEC SCHOOL	1	0	1	MARACHA
AMACH COMPLEX SS	0	0	0	LIRA
KAMPALA GOMBE SS	0	0	0	KAMPALA
ST ANDARD COLLEGE, BUGIRI	0	0	0	BUGIRI
<b>TOTAL</b>	<b>52 340</b>	<b>49 826</b>	<b>102 316</b>	