Scholars Journal of Arts, Humanities and Social Sciences **ISSN 2347-5374(Online)**
Abbreviated Key Title: Sch. J. Arts Humanit. Soc. Sci. **ISSN 2347-9493(Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjahss.2018.v06i09.016

Enrolment at University Level in Kenya and Its Equity Implications: A Case of Moi University

Joash A. Migosi*
Lecturer, University of Nairobi, Kenya

***Corresponding author**
Joash A. Migosi

Article History
Received: 03.09.2018
Accepted: 13.09.2018
Published: 30.09.2018

Abstract: The purpose of this study was to investigate the Enrolment at University Level in Kenya and Its Equity Implications: A Case of Moi University. The study was carried out in the 1995/96 academic year and focused on selected faculties and schools in regard equity implications in University enrolment at undergraduate level. The population studied was drawn from all faculties/schools at Moi university Main campus, Chepkoilel Campus, Faculty of Health Sciences and Maseno University College. Proportionate random sampling technique was employed in identifying the respondents to this study. The questionnaire and document analysis guide were the key instruments used in this study. The test-retest method was used in determining the reliability of the questionnaire which yielded a coefficient of r=0.74. For secondary data, the study used Document Analysis Guide which was used to collect data from the university authorities and the Ministry of Education Statistics Division and number of candidates who sat for Kenya Certificate for Secondary Education in the years 1990-93. Data from the questionnaire and the Document Analysis Guide were analysed using descriptive statistics. Results of this study shows that parents of female students have better education than male students' parents. Female students have more numbers of mothers who are school teachers, small scale businesswomen and civil servants unlike their male counterparts. Mothers' educational background shows that 85.91% and 56.38% of the male and female students respectively come from the low socio-economic group while the rest form the middle and upper socio-economic groups. The available information from this study, therefore, indicates that most male students are drawn from a lower socio-economic group while female students are drawn from middle socio-economic groups. On gender representation, this study revealed that female student enrolment at Moi University is quite low compared to male enrolment. Further analysis in terms of regional representation in university enrolment in Kenya, it was clear that there were distinct disparities in enrolments. For example in Central province it was clear that Nyeri, Murang'a and Nyandarua districts were over-represented in enrolment while Kirinyaga and Kiambu districts fell in the medium level category. Central provinces have got no single district in the low level category. This makes it the most privileged province in Kenya with regard to Moi university enrolment. Coast province was the most under-privileged in Moi university enrolment. It had no representation in the medium and high level categories of districts. Generally it was clear who went to University in Kenya, deep disparities in university enrolment at university level in Kenya need to be addressed if at all the true fruits of university education are to be accessed by all, this may require invoking a targeted affirmative action.

Keywords: Equity, equality, Disparity, Socio Economic Status, regional, gender, Students, Higher Education, University, Kenya.

INTRODUCTION

The rationale for disparities in Kenya is diverse and originated in the economic mode of colonial development, the location of missionary activity and the pattern of local self-help activity [1, 2]. These disparities in education have continued to show up in regional economic developments in Kenya over the years.

The distribution of education opportunities has historically been inequitable across Africa [3]. Parts of these disparities have their roots in the history of colonialism. This is because formal education in Africa was mainly introduced in the wake of colonial penetration and areas to be first "opened up" such as the coastal areas of Sierra Leone, Ghana and Nigeria, enjoyed some advantage in the educational sphere over other countries [4]. The earliest Western –type school was set up in Sierra Leone in 1792 [3]. In Ghana, the

Portuguese are believed to have built a school in the sixteenth century while the Christian Missionary Society put up a school at Badagri in Nigeria in 1840s. Formal education in these regions, paved way for higher education that has taken root in most of the West African countries.

Apart from Egypt, West African countries boast of earliest universities than most parts of Africa [5]. Some of these inequalities in the distribution of university education in Africa were brought by the activities of the Christian missionaries. Some countries, particularly in southern Africa, racial discrimination in higher education has been noted, for example, in Zimbabwe, school attendance for European children has been compulsory since 1930 while that of Asian children since 1938 but no such provision was made for African children. He European children had a privilege of almost automatic entry to Secondary school while those of Africans had no such provisions. Atkinson [6], observes that African children could study only for the Cambridge school certificate and had few opportunities for specialization that would prepare them for university programmes.

Sifuna [7] argues that; Education both in the colonial days and post-independence was designed and manipulated to enhance the socio-economic development of the traditional elite, in this way; it has been geared to producing a small class of people who are capable of dominating and oppressing a majority. Missionaries selected children of chiefs, preachers, catechists, businessmen and those who accepted the tents of Christianity. This means that the inter-generational effect has continued to widen the disparities from primary, secondary to higher levels of education. There also exists an imbalance in the use of opportunities for higher education [8]. Available information suggests that students with fathers or guardians in professional occupational categories are more than proportionately represented at universities throughout the African continent [8]. A study by Fields [9] on social composition of university students in Kenya revealed that most of the students were drawn from high socio-economic backgrounds. On the contrary, studies conducted by Barkan [10] indicate that social composition of university students at Makerere (Uganda), Dares salaam (Tanzania) and Legon (Ghana) were present from peasant families followed by students belonging to civil servants. Gustav [4] notes that;

…at the university of Legon (Ghana) the students whose fathers were engaged in non-manual jobs and occupations decreased from 56 in 1953 to slightly more than 43 percent in 1963 while the proportion of students whose fathers and guardians were farmers and fishermen rose from 26 percent to 39 percent during the same period.

In such a controversy, reliable data on the student composition at university level is very crucial in making decisions on who should benefit from the government scholarship and bursary schemes.

Hughes and Mwiria [11] argued about discrepancies in female enrolment at the primary school and secondary school levels, majorly attributed to malpractices at the primary school level leading to wastage in education [12]. Highest discrepancies are witnessed at the tertiary level of education [13].

In 1922, Makerer University was established as a small technical school. This nucleus formed the higher education as we know it today in the region [13, 14]. Uganda continued to dominate student enrolment in the region and in 1940, a quota system of admission to Makerere was established from the region. Later, Kenya could dominate the quota and went overboard to take up unfilled quotas from other countries. This was indeed a disparity in the making since this disparity gap remains to date [14]. In later years, there was a flexible rule to fill vacant places, and this flexibility was exercised to a considerable extent as noted; Due to the increasing regional emphasis at Makerere and to the need of raising admission standards, the composition of the student body inevitably changed [14].

Disparities in higher education continued to increase, for example, between 1959 and 1961, Kenya dominated in the airlifts to study abroad [14]. This was done through private arrangements and American scholarships particularly assigned for Kenyans. The breakdown of airlifts was as follows: in 1959, Kenya, Uganda and Tanganyika took 78, 1 and 2 students respectively. In 1960, the trend was, 240, 10, and 37 for Kenya Uganda and Tanganyika respectively. And in 1961, it was 116, 17 and 13 students respectively for the three east African countries [14]. This implies that Kenya had an edge over the rest of the east African countries in its share to higher education abroad.

The demands of divergent political and socio-economic philosophies of the three East African countries forced the three university colleges to assume more national outlooks and in 1970, they all became fully fledged national universities [15].

The government of Kenya, immediately after independence, established the Kenya Education Commission that was to survey educational resources in Kenya, and advice government in the formulation and implementation of national policies and goals for the education. One of the goals of education formulated was promotion of social equality and removal of barriers/divisions in Kenya particularly with regard to race, tribe and religion [15]. However, considerable differences have continued to be noted ineducational participation of individuals classified by sex, socio-economic background, urban and rural areas, race,

language and religion [9]. These differences are not only evidenced in primary and secondary schools but also in institutions of higher learning particularly at the university level. The disparities can further be seen exercised at the family unit level [14] notes that the female enrolment patterns in primary schools in Kenya suggest that, when confronted with constraints of limited opportunities or resources for primary schooling, parents have generally preferred the education of male children. Still these disparities can be seen at the regional levels especially in regard to the major economic regional activities. Regional economic disparities can be noticed in Kenya that is, some regions with most employment opportunities and greater agricultural activity especially of cash crops, are also the regions of greater educational progress and proportionately greater participation in education [18].

Maundu *et al*. [16] and Jabre[17] noted that causes of disparities in education are largely cultural though reinforced by economic circumstances in that parents give priority to boys education which is considered more important than girls education in most societies. In pastoral areas, for example, boys are normally expected to be with their fathers learning about the secrets of the family and participate in cattle rearing while girls are expected to have been married [16, 17].

The government of Kenya, since independence, has tried to tackle the problem of educational imbalances. For example, the sessional paper no.10 of 1965 on African Socialism and Its Application to Planning in Kenya, has acknowledged the government's commitment to the objectives of social injustice and equality of opportunities in economic, political and educational spheres. The government has, through various policy recommendations tried to address itself to improve access to the opportunities for the disadvantaged groups in society [19]. The government also set up a presidential working party on education to re-emphasize the government policy in providing equal education and training opportunities to all areas in an attempt to reduce these inequalities [15].

Moi University was established as the second university in 1984 following a report of the presidential working party on the second university, the Mackay Report of 1981. Kenyatta University, formerlya constituent college of the University of Nairobi, became the third university in Kenya in 1987 [20]. Among the reasons for establishing these universities was the need to widen the opportunity for higher education. Currently the public universities in Kenya stand at 31 spread throughout the country.

University education in Kenya has received special attention since independence to the present in its financing. The government has allocated a substantial amount of money to the development of university education [20]. This can be explained partly by the hope that the government has in the ability of graduates from the universities to promote both economic and social development particularly in the areas they come from in order to address regional inequalities. Republic of Kenya [11] notes: University education and training programmes are expected to respond to the demands of national development and emerging socio-economic needs with a view to finding solutions to the problems facing society. The key recommendation of the report on the National Committee on Educational Objectives and Policies was to review regional imbalances in education regularly so as to find ways and means of reducing them [21]. Studying inequalities is important because the educational inequalities are followed by inequalities in the labor market; and these in turn produce and reinforce inequalities between individuals, social groups, incomes, living standards and political power in society [22]. Bray [23] and Wainaina [24] observe that education promotes mobility within society and is therefore the most efficient institution for reforming society for the better.

This study is an attempt to look at the regional imbalances that could have been sparked by distribution of higher education opportunities in Kenya and see how possible to respond to any possible inequalities. Given the critical role that higher education plays inaddressing inequalities in the country, it is therefore prudent to examine the composition of university students in Kenya. This demand for responses to a key question at hand which is, who goes to university in Kenya?

Analytical Framework

This study is based on Rawls' theory of social justice, that is, "fairness" or equal chances of participation. To have justice therefore, means all social primary goods, liberty and opportunity, income and wealth and the bases of self-respect are to be distributed equally. Rawls [25] in his book defines justice as the elimination of arbitrary distinctions and the establishment, within a structure, of a practice of a proper balance between claims. Therefore the social and economic inequalities are to be set up for everyone's advantage and under conditions of equal opportunity. He reinforces his argument by saying that; *….in order to treat all persons equally, to provide genuine equality opportunity, society must give more attention to those with fewer assets and to those born into the less favourable social positions*. The idea is to redress the bias of contingencies in the direction of equality. In pursuit of this principle greater resources might be spent on the education of the less (or the disadvantaged) than the most intelligent at least over a certain time of life [25].The desire of this argument is to redress inequality and achieve parity at all levels.

In the context of this study, university education must be accessible to all without arbitrary

distinctions as those between gender groups, regional or socio-economic status. The issue of efficiency and equity is paradoxical in that one cannot be implemented without sacrificing the other. However, they are equally important.

METHODOLOGY

The population studied was drawn from all faculties/schools at Moi university Main campus, Chepkoilel Campus, Faculty of Health Sciences and Maseno University College, that is, School of Social, Cultural and Development Studies, Faculties of Technology, Information Sciences, Forestry and Wildlife Management, Science, Health Sciences, Law and Education. The study was restricted to the undergraduate students in all years of study during the 1995/96 academic year of study. Proportionate random sampling technique was employed in identifying the respondents to this study. 10 percent of the total enrolments in each Faculty/School were considered for the study except the Faculty of Law which is considered 26% of the students due to the low enrolment in the faculty. This ratio was considered appropriate in social sciences [26]. The questionnaire and document analysis guide were the key instruments used in this study. The construction of the questionnaire items was based on the information gathered during the literature review. The literature helped to identify the items that could lead to determining the socio-economic background of the students. The test-retest method was used in determining the reliability of the questionnaire. The Pearson product moment correlation coefficient was worked out to give r = 0.74. This was considered enough measure to make the instrument reliable [26].

For secondary data, the researcher developed a proforma (Document Analysis Guide) which was used to collect data from the university authorities and the Ministry of Education Statistics Division, number of candidates KCSE 1990-93. The data collected included: the total university intakes in the last five years, enrolment by sex, and enrolment by faculty/school and home provincesl districts of the students. A letter of introduction was attached to each questionnaire, stating clearly the purpose of the study. The questionnaires were given out to 822 sampled students using research assistants who were picked from each faculty/school and well trained on the exercise. The research assistants were quite familiar with their fellow students and therefore it was better to use them. The questionnaires were administered to the students and were requested to return the filled questionnaires to the research assistants. The return rate of the questionnaires was 70%. This was calculated from the number of questionnaires administered (822). This return rate was therefore considered sufficient to provide the required information. The questionnaire sought information on the students' personal background and on the family's socio-economic background.

A proforma seeking information from the university was given to the officers in charge of student registry (Admissions) by the researcher. The officers provided the information that was sought in regard to student distribution in faculties, students' gender and districts and provinces of origin. Data from the questionnaire and the proforma were analyzed using descriptive statistics. Data on regional disparities was analyzed using Gini coefficient and coefficients of equality. The total number of students who sat for "O" level Examinations (1990-1993 cohorts) formed the total population for this study while the number which actually made it to Moi University was considered as the enrolment.

FINDINGS

These findings on student socioeconomic status are critical as observed by Anderson [27] who pointed out that there are practically no surveys conducted in developing countries on the socio-economic background of university students. There are, however, piece meal studies that deal with one or two variables in universities. This study was therefore critical in understaning the critical role such a study has brought to the fore.

In the 1950s German Social Scientists became interested in studying the Disparities in higher education when female enrolments were at their lowest. Dahrendorf [28] summarized the inequality situation in Germany by noting that majority of civil servants came from homes of civil servants with less from middle class citizens[19]. Elsewhere these studies are consistent with Jayaram [29] who studied students enrolemnet at university in India.

A key indicator of socio-economic status of Moi university students was their parent's occupation. Under this item, the study sought to find out the type of job performed by both parents of the student. The frequently named job category was that of peasant farmers. Male students indicated that 73.5% of their mothers were peasants while female students indicated that 50.35% of their mothers were peasants. About 12% of the mothers of male students were civil servants compared to 4% of the mothers of male students. The fathers of Moi university students, indicate that 57.4% and 49.21% for male and female students fathers respectively, are peasant farmers while fathers who are civil servants are (17.94%) for males and (11.11%) for females.

Another item that sought information on the student's socio-economic status was the student's total family income per month. The information obtained here showed that most students were drawn from a middle level income that is, earning between Kshs. 2,000 and Kshs. 8,000/=. This was represented by 41.79% and 48.88% for male and female. This was followed by category three of earnings exceeding Kshs.

8,000 where 38.61% and 31.46% represented male and female students respectively. Category one of those earning less than Kshs. 2,000 had the fewest representation of 19.6% and 19.66% for male and female students respectively.

On the other hand, student opinion sought on their socio-economic stratus revealed that male students were from a low social-economic group (66.2%) while the majority of female students were from middle socio-economic group (62.5%), this revelation confirms other assessments of socio-economic strata as opposed to their female counterparts [30], Hughes [21] and Njenga [23]. This therefore means that most students are drawn from middle socio-economic groups. On the other hand, data on student's personal opinion of the social group under which they fall indicated that male students (60.21%) indicate that they are from lower social group while 62.5% of the female students indicate that they are drawn from middle social group. From the data presented earlier, it can be concluded that both male and female students are drawn from the lower socio-economic groups.

The current study agrees with a study in Poland by Sanyal and Josefowicz [31] where there were glaring inequalities at university level and in line with existing social strata. The findings in this study are also consistent with findings by Anderson [27], Gold Thorpe [32], [9]; Njenga [23], Eshiwani [33], Bowman and Anderson [27], Maundu [16], Sabot *et al*. [34], Ndege [35], Teichler and Sanyal [19], Siva Kumar [36], Ahmad [29], Mehta [37], Goldstein, [6], Jayaram [30], Jayaram [27], Van den Berghe [38], Fields [9] and Barkan [10].

The study investigated regional representation of students at Moi University using Gini's Coefficients. Data used in this sub-section was obtained from the Ministry of Education Headquarters (Statistics Division) and Moi University Student Registry. The Ministry of Education provided information on student population while Moi University provided student enrolments. The student population used in this study was the data on the form four students who sat their K.C.S.E examinations in the years 1990, 1991, 1992 and 1993. This was the cohort from which the current number of Moi University students from year one to year four is drawn. Students who had dropped out, repeaters and fifth year students were not taken into account because their data was not available.

The Gini coefficient was employed in tracing the disparities in Moi university enrolment. These methods were borrowed from A. H. ter Weele [11] who had developed and used them in measuring distribution of education in Kenya. In this study, the Lorenz curve is plotted after calculating the cumulative percentages for Moi university enrolment and student population who sat K.C.S.E between 1990 and 1993, for they constitute the current Moi university undergraduate students population. The Lorenz curves for seven provinces in Kenya have been drawn using district populations and enrolments. The districts used in this study were those appearing in the Ministry of education's annual Returns in 1990. Consequently, the new districts were merged with their former mother districts, for example Nyamira to Kisii, Bomet to Kericho and Homa Bay, Migori, Suba and Kuria to South Nyanza. Nairobi province could not be used because it had no districts which could be used to plot the Lorenz curves hence deduce the Gini's coefficient. Provinces have been used because they are the main administrative units in Kenya.

The Gini's coefficient is calculated from the Lorenz curve. The total areas below the line of perfect equality are calculated together with the area that represents the inequality. The ratio of the region of inequality to the total area below the line of perfect equality is the Gini's coefficient. It ranges between 0 and 1. When the Gini's coefficient is 1, then it represents perfect inequality and when it is 0, perfect equality. In this study, the Gini's coefficient ranged between 0.04 and 0.49. This means that the province with a coefficient of 0.04 was the one with a fair equality while 0.49 represents a high level of inequality. For the purpose of this study, an index lying between 0.04 – 0.20 shall represent a fair distribution while an index between 0.20 – 0.19 shall represent an unfair distribution.

The first province to be analyzed was Rift Valley. This is the largest province in Kenya in terms of geographical area in square kilometers and the number of districts because it has over 13 districts. It had a total of 107,413 students who sat for K.C.S.E between 1990 and 1993. This was the second highest figure nationally after central province with 113,469 students. Nakuru district had the highest number of candidates with the lowest number of candidates were Turkana, Samburu and West Pokot with 1,315, 1, 347 and 2,929 students respectively.

Nakuru and Kericho districts led in the number of Moi university enrolment with 339 (22.3%) and 282 (18.64%) students respectively. Turkana, Samburu and West Pokot had 2, 7 and 26 students respectively. A total of 1513 (21.88%) students were drawn from the Rift Valley to Moi University. The Gini coefficient was calculated which yielded an index of 0.11. This indicates that the distribution of Moi university enrolment in Rift Valley was fair (Table 1).

Nyanza province had four districts as at 1990. The secondary school student enrolment was highest in Kisii district with a population of 40,442 (49.68%) students while Kisumu, South Nyanza and Siaya had a student population of 15,408 (18.93%), 14,184 (17.42%) and 11,365 (13.97%) respectively. This

shows that Kisii district had almost half of the secondary school student population. The Moi university enrolment indicated that Kisii district had 37.29% of the students followed by Siaya, Kisumu and South Nyanza with 22.23%, 21.52% and 19.86% of the students respectively. The Gini coefficient calculated stood at 0.16.

Table-1: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Rift Valley Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Kericho	20.91	18.64	20.91	18.64
E/Marakwet	7.71	6.15	28.62	24.79
Kajiado	3.35	1.98	31.97	26.77
Turkana	1.22	0.13	33.19	26.9
West Pokot	2.73	1.72	35.92	28.62
Samburu	1.25	0.46	37.17	29.08
Nakuru	22.83	22.34	60.00	51.42
Nandi	9.29	9.12	69.29	60.54
Laikipia	4.49	4.49	73.78	65.03
Narok	2.19	2.38	75.97	67.41
Baringo	9.31	10.58	85.28	77.99
Trans Nzoia	5.50	8.99	90.78	86.99
Uasin Gishu	9.22	13.02	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

Coast province has six districts in total. Secondary school student population was fairly distributed in some districts although few showed extremities. Taita Taveta and Mombasa had 29.46% and 26.65% of the students respectively. Lamu had 3.6% of the students representing the lowest represented district while Kilifi, Kwale and Tana River districts has 22.54%, 11.73% and 5.99% of the student's respectively. The total number of students was 36,500 representing 6.8% of the total national student population.

These results were consisted with David Court and Kabiru Kinyanjui [39] findings for a study they conducted between 1965-1976 which revealed that central province was enrolling over 100 percent of the primary school age-cohort, with coast, Rift Valley and North Eastern provinces lagging far behind in the primary school enrolments. They also presented data which divided the country into three groups according to the proportion of school –age population in school. These results are also consistent with Court and Kinyanjui, 1980 who found that overrepresented districts were economically and politically powered districts in the country and had utilized their positions to maintain leadership in education [39]. The districts in the white highlands include those in the central province like Nyeri, Laikipia, Nyandarua and Kiambu.

Students at Moi University while its student population was 26.65% only. This kind of phenomenon may be explained by the nature of the district. Most parts of Mombasa lie along the Nairobi-Mombasa highway; this has led to springing up of urban areas, this may have attracted more people from outside the district and may have led to their students doing well in national examinations hence boosting their university intake. Secondly, Mombasa feeling the provincial headquarters and the main entrance to Kenya may have favored the resources that go along with better learning.

Table-3: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Coast Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
TaitaTaveta	29.46	19.24	29.46	19.24
Tana River	6.0	1.51	35.46	20.75
Lamu	3.62	1.51	39.08	22.26
Kwale	11.73	10.94	50.81	33.2
Kilifi	22.54	26.42	73.35	59.62
Mombasa	26.65	40.38	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

Taita Taveta district that presents a big number of students in form four examinations produced 19.25% of the students from Coast Province entering Moi University. Lamu and Tana River districts each had 1.5% of the total Moi university enrolment from Coast Province. Plotting the Lorenz curve shows that coast province has an unfair distribution of Moi university enrolment among its districts. The calculated Gini coefficient yielded an index of 0.2 which shows a fair representation in the Moi university student enrolment in Coast Province.

North Eastern Province had the least number of students who sat for the form four examinations between 1991 and 1993. Of the total 535,474 students who sat the K.C.S.E. examination, only 2,286 (0.43%) students were from North Eastern Province. For the four years, female students formed 26.9% of the total student population. Of the three districts in the province, Garissa, Wajir and Mandera had a student population of 38.19, 36.88 and 24.93 percent respectively. This means that Garissa produced the highest number of students. On the other hand, the Moi University student enrolment showed that Mandera was the most favored district in North Eastern province with a student population of 47 (73.4%) of the total Moi.

Table-2: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Nyanza Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Kisii	49.68	37.29	49.68	37.29
Kisumu	18.93	18.96	68.61	56.25
South Nyanza	17.43	21.52	86.04	77.77
Siaya	13.96	22.23	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

University enrolment from North Eastern province indicated that Garissa and Wajir had 14.06% and 12.5% of the students respectively. This anomaly is quite big given that Garissa presents more students for form four examinations. The Lorenz curve shows that North Eastern province provides the widest disparity in Moi university enrolment more than all the other provinces. This yielded a Gini coefficient index of 0.49 as shown in Table 4.

Table-4: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for North Eastern Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Wajir	36.88	12.5	36.88	12.5
Garissa	38.19	14.06	75.07	26.56
Mandera	24.93	73.44	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

Eastern province has six districts in total. The highest student population was from Machakos district forming 48.46% of the student population. This was followed by Meru, Kitui and Embu with 26.66%, 11.94% and 10.6% respectively. Isiolo and Marsabit trailed behind with less than 2% of the total student population. Eastern province had a population of 98,184 students representing 18.33% of the national student population who sat for form, four examinations between 1990 and 1993. Eastern province represented 18.34% of the total student population in the country while in Moi university enrolment; the province had 18.17% of the total students enrolled in the 1995/96 academic year. Machakos district was leading in Moi university enrolment from Eastern Province with 47.89% of the students followed by Meru and Kitui with 22.2% and 18.7% of the students respectively (Table 5).

Embu recorded a 10.1% in the student enrolment while Marsabit and Isiolo tailed with seven students each with less than 1%. It was interesting to note that Machakos district had a proportionate representation at Moi University because it had 48.89% of the student population and its Moi university enrolment was 47.89%. Eastern province depicts a fair distribution of Moi university enrolment in all its districts because the Lorenz curve is relatively narrow and the Gini Coefficient index calculated was 0.09.

Table-5: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Eastern Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Meru	26.66	22.2	26.66	22.2
Marsabit	1.28	0.56	27.94	22.76
Machakos	48.46	47.89	76.4	70.65
Embu	10.6	10.10	87.0	80.75
Isiolo	1.06	0.56	88.06	81.31
Kitui	11.94	18.69	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

Table-6: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Western Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Kakamega	61.46	56.16	61.46	56.16
Busia	10.81	12.58	72.27	68.74
Bungoma	27.73	31.26	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population are K.C.S.E candidates 1990-1993 cohorts

Western Province had three districts in 1990; namely, Bungoma, Busia and Kakamega District had the largest number of students representing 61.47% while Bungoma and Busia followed with 27.72% and 10.81% respectively. Western province had a total of 69,297 students who sat the K.C.S.E examination between 1990 and 1993. The Moi university students enrolment among the districts of western province showed that Kakamega scored 56.16% of the student enrolment while Bungoma scored 31.26% and Busia trailed with 12.58$% of the total Moi university enrolment from western province in the 1995/96 academic year (Table 6). Construction of the Lorenz curve showed that the curve was quite close to the line of perfect equality (Fig. 4.6). This means that the level of equality in western province is quite high. The Gini coefficient was calculated from the Lorenz curve and it showed a high level of equality because the coefficient index was 0.05.

Central province was the last province to be analyzed. It was also not possible to construct the Lorenz curve for Central province because the cumulative enrolment percentage for most of the districts in the province were greater than the population percentage actually registered for K.C.S.E. Central province had a total of 113,469 students who sat the K.C.S.E. examinations between 1991 and 1993. This represented 21.19% of the total student population that sat for K.C.S.E. for those years. The number of students admitted to Moi University was 1,347 representing 19.47% of the total Moi university enrolment. Nyeri, Murang'a and Kiambu were the leading districts with 27.62%, 25.38% and 24.13% of the students' enrolled respectively (Table 7). This leaves Nyandarua and Kirinyaga districts lagging behind with 14.33% and 8.54% respectively. Of all the districts in Central province, this enrolment seems to favour Nyeri districts because the student Population that sat for K.C.S.E examination in the respective years was much lower than that from Kiambu district. The construction of the Lorenz curve was not possible because it had to go above the line of perfect equality. This implied that most of the districts in the province had overenrolled in Moi university intake more than their population. This implies that the student enrolment at Moi University is fairly drawn from the central province. This is further supported by a very low Gini coefficient of 0.04.

The last level of analysis is that of the national level (Table 8). This level is very crucial in identifying the disparities in Moi university enrolment per province. At this level, Rift Valley province had the highest number of students enrolled forming 21.88% of the total student enrolment of Moi university. Other provinces that followed closely were Central, Eastern and Nyanza with 19.47%, 18.17% and 16.32% respectively. Western, Nairobi, Coast and North Eastern provinces had lower enrolments with 11.61%, 7.79%, 3.83% and 0.93% respectively. The population used in this study was the K.C.S.E candidates between 1990 and 1993. This gave 535,474 students in those four years nationally. The student enrolment in those years at Moi university who constituted the 1995/96 academic year were 6917 forming 20.3% of the undergraduate student enrolment at the public universities in Kenya during the same academic year. Calculation of the Gini's coefficient of 0.08 show an equitable distribution of enrollment at Moi University.

Table-7: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Central Province by Districts in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Kirinyaga	10.61	8.54	10.61	8.54
Murang'a	23.07	25.39	33.68	33.93
Nyeri	25.12	27.61	58.8	61.54
Nyandarua	8.99	14.33	67.79	75.87
Kiambu	32.21	24.13	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population is K.C.S.E candidates 1990-1993 cohorts

Table-8: Moi University Enrolment, Cumulative Population and Cumulative Enrolment for Kenya by Province in 1995/96 Academic Year

District	Population in %	Enrolment in %	Cumulative Population in %	Cumulative Enrolment in %
Coast	6.81	3.83	6.81	3.83
Central	21.19	19.47	28.0	23.3
Western	12.94	11.61	40.94	34.91
Eastern	18.34	18.17	59.28	53.08
N/Eastern	0.43	0.93	59.71	54.01
R/Valley	20.06	21.88	79.77	75.89
Nairobi	5.03	7.79	84.8	83.68
Nyanza	15.20	16.32	100	100

Source: Ministry of Education Annual Reports and Moi University Nominal Rolls
Notes: (a) Enrolment in Moi University in 1995/96 Academic Year.
(b) Population is the K.C.S.E candidates 1990-1993 cohorts

Regional Representation of Students at Moi University using Coefficients of Equality

A further analysis of regional representation was done using the coefficient of equality. This tool of analysis was borrowed from Commissioner [40], who used it to analyze the representation of various castes in India's Higher Education system. It was used in 1964-65 and 1974-75 and the results showed that the scheduled castes' coefficient increased from 2.93 in 1964 – 65 to 3.9 in 1974-75. The formula is given as follows:

$$C.E = e: E/p : P$$

Where
E = Total enrolment at Moi university
P = Total national population
E = Enrolment of students per district /province at Moi University
P = Total population of district/province
C.E = Coefficient of equality

If the coefficient of equality is 1.00 the enrolment of given district/province is in proportion to their population. If it is less than 1.00 it indicates that their enrolment is less than proportionate to their population and if it more than 1.00 then their enrolment is more than proportionate to the population. The population used in the calculation of the coefficient of equality is from the National census that was conducted in 1989 and whose results were published in 1994.

Using this tool of analysis, the districts were grouped into three (3) categories to their student contribution to Moi university enrolment so it assisted in giving a clear picture on inequality. Group one (1) or low group represented the under-represented districts in Moi university enrolment in respect to their 1989 national census populations. Group two (2) or medium group gave proportionate number of students to the national population of individual districts. The national population was extracted from the 1989 national census whose report was published in 1994 and the high or group three (3) represented the overrepresented districts. The first group, that is low, had the highest number of districts totalling to eighteen while the second and third groups had 13 and 8 districts respectively.

Kirinyaga district was the only district in Central province with less than 1.00 index. On the other hand Nyeri had the highest coefficient of 1.89. All the districts in Coast province fell in the low category with Tana River district lagging behind with a coefficient of 0.10. Machakos took the lead in Eastern province with a coefficient of 1.33 (Table 9). This made it to be the only district from the eastern province to fall under the high category of districts. In the same province, Marsabit had the lowest coefficient of 0.17, this pushed it top the low category of districts.

Table-9: Coefficients of Equality in Moi University Enrolment of Low Level Category of Districts in 1995/96

District	Population (1989)	Moi University Enrolment	Coefficient of Equality
Kilifi	591,903	70	0.37
Kwale	383,053	29	0.65
Lamu	56,783	4	0.22
Mombasa	461,753	107	0.72
TaitaTaveta	207,273	51	0.76
Tana River	128,426	4	0.10
Isiolo	70,078	7	0.31
Marsabit	129,262	7	0.17
Meru	1,144,594	279	0.76
Garissa	124,835	9	0.22
Wajir	122,769	8	0.20
South Nyanza	1,066,583	243	0.70
Kajiado	258,659	30	0.36
Narok	398,272	36	0.28
Samburu	108,884	7	0.20
Turkana	184,060	2	0.03
West Pokot	225,449	26	0.36
Busia	401,658	101	0.78

Source: Central Bureau of Statistics and Moi University Nominal Rolls
Note: The Population is per the 1989 National census

Table-10: Coefficients of Equality in Moi University Enrolment of Medium Level Category of Districts in 1995/96

District	Population (1989)	Moi University Enrolment	Coefficient of Equality
Kirinyaga	391,516	115	0.91
Kiambu	914,412	325	1.10
Embu	370,138	127	1.06
Kitui	652,603	235	1.12
Mandera	123,787	47	1.17
Kisii	1,137,054	421	1.15
Kisumu	664,086	214	1.00
Kericho	900,934	282	0.97
Laikipia	218,957	68	0.96
Nandi	433,613	138	0.99
Trans- Nzoia	393,682	136	1.07
Bungoma	679,149	251	1.15
Kakamega	1,463,525	451	0.95

Source: central Bureau of Statistics and Moi University Nominal Rolls
Note: The Population is per the 1989 National census

Table-11: Coefficients of Equality in Moi University Enrolment of High Level Category of Districts in 1995/96

District	Population (1989)	Moi University Enrolment	Coefficient of Equality
Murang'a	858,063	342	1.23
Nyandarua	345,420	193	1.73
Nyeri	607,292	372	1.89
Machakos	1,402,002	602	1.33
Baringo	347,990	160	1.42
E/Marakwet	216,487	93	1.33
Nakuru	849,096	338	1.23
Uasin Gishu	445,530	197	1.37

Source: Central Bureau of Statistics and Moi University Nominal Rolls
Note: The Population is per the 1989 National census

North Eastern province had the widest disparity in terms of districts. Mandera took the lead with a coefficient of 1.17 while both Garissa and Wajir had 0.22 and 0.20 coefficients respectively making them to fall under the low category of districts.

In Nyanza province, Kisumu district was the only district in the country to have a coefficient of 1.00 meaning that it had a proportionate share of enrolment at Moi University with its population. However, Siaya and Kisii were over-represented with 1.22 and 1.15 coefficients respectively. South Nyanza trailed behind with a coefficient of 0.70 thus falling under the low category of districts.

Rift Valley province had the highest number of districts in the middle and higher categories. The leading district was Baringo which had a coefficient of 1.42. Others that followed were Uasin Gishu, Elgeyo Marakwet, and Nakuru with coefficients of 1.37, 1.33 and 1.23 respectively. The most underprivileged district came from this province and that was Turkana with a coefficient of 0.03. Others that fell on the low category of districts were Samburu, Narok and West Pokot with coefficients of 0.20, 0.28 and 0.366 respectively.

Western province districts were well represented with Bungoma taking the lead in Moi university enrolment followed by Kakamega and Busia with coefficients of 1.15, 0.95, and 0.78 respectively. At the provincial level, two provinces, that is, Nairobi and Central province fell in the high category of provinces with coefficients of 1.26 and 1.34 respectively. This means that Central province was over-represented in the Moi university enrolment. While Eastern, Nyanza, Rift valley and Western provinces had 1.03, 0.99, 0.94 and 0.98 coefficients respectively, Coast province and North Eastern province lagged behind with 0.45 and 0.53 coefficients respectively. This point out that Coast province had the least enrolment at Moi University in proportion to its population.

Table-12: Coefficients of Equality in Moi University Enrolment per Province in 1995/96

Province	Population (1989)	Moi University Enrolment	Coefficient of Equality
Central	3,116,703	1,347	1.34
Nairobi	1,324,570	539	1.26
Eastern	3,768,677	1,257	1.03
Nyanza	3,507,162	1,129	0.99
Western	2,544,329	803	0.98
Rift Valley	4,981,613	1,513	0.94
North Eastern	371,391	64	0.53
Coast	1,829,191	265	0.45

Source: Central Bureau of Statistics and Moi University Nominal Rolls
Note: The Population is per the 1989 National census

Gender Representation in the Faculty of Education

This faculty had the arts class until 1989 when the Education Technology was introduced. Education (Science) and education (Home Science) were introduced in the subsequent years. For the purpose of this study, this faculty has been subdivided into education science and education arts. Education science shall comprise of education technology, education, science and education home science.

In the 1993/94 academic year, there was an out-of-proportion enrolment in the faculty. This was due to the double intake of 1990 of the previous 7-4-2-3 and 8-4-4 systems of education in Moi University. This also saw a rapid growth in female student enrolment in the faculty. However, the highest female enrolment in the faculty was in 1989/90 academic year when 36.01% of the total B. Ed (Arts) student enrolment in the faculty was female. In 1993/94 academic year, female representation was lowest with 28.1% of the student enrolment in the education science category. The 1994/95 academic year revealed an almost at par picture between the female students in Bed Science and Arts. In 1995/96 academic year female students depicted a lower enrolment (31.34%) in education science than the B.Ed Arts category (33.35%).

All the same, the number of male's students in both arts and science was much higher than that of the female students. Although teaching is supposed to be a popular profession among the female students, these statistics clearly show that for a long time to come, the number of women science teachers in the country will continue to be small. This has an adverse effect on science education for girls in two ways. First, the majority of teachers teaching science and mathematics at the secondary school level will continue to be male teachers who have little patience with the girls and whose attitudes towards the ability of girls to learn sciences and mathematics is negative [41]. Secondly, as long as the girls do not see and interact with women science teachers, they will feel that science is not for women.

Gender Representation in the Faculty of Science

Essentially, this study is about gender access to university education in Kenya. It is therefore important to see how gender is represented at the Faculty of Science in Moi University. This study will be a pointer to the position of over related fields. The data collected for this study show that women enrolment dropped from 8.9% in 1987/88 academic year to 6.85% in 1989/90 academic year. Of particular significance and worth noting was the 1993/94, 94/95 and 95/96

academic years which recorded progressive increases in female student enrolments studying science. The female student numbers rose from 17 in 1989/90 to 228 in 1995/96 (Fig. 4.10). There are many reasons that can explain this trend. First, the 1993/94, 94/95 and 95/96 academic years had the 8-4-4 system of education students. This system lays more emphasis on science combinations and this might have resulted into more women enrolling in science based courses. Second, the vice-chancellors Committee policy of two points over for the girls might have contributed to this rise. The 28% of female student (highest so far) in sciences is still low compared to their male counterparts.

Gender Representation in the Faculty of Technology

Figure 4.11 shows the proportion of male and female students in the Faculty of Technology. The highest number of women students enrolled in this faculty was 21 in 1994/95 academic year and 6.38% of the total enrolment in technology that year. This is expected since one of the admission requirements into this faculty is a good grade in Mathematics and because of this; girls have not enrolled in many numbers in the faculty.

Gender Representation in the Faculty of Forestry Resources and Wildlife Management

The similar pattern of enrolment in the Faculty of Technology is to be found in this faculty. Figure 4.12 shows the female enrolment pattern in this faculty to be quite low. In 1989/90 academic year, female enrolment was the highest at 13.4% and the lowest was in 1993/94 academic year with 10.1%. It is the hope of the researcher that this pattern should change now that other departments have started in the faculty however; it was interesting to note that of the 100 students registered in the department of tourism, and only 13% were female students. This is the faculty with low female enrolment after the faculty of technology. One of the reasons for this low enrolment is the lack of women candidates with better grades in mathematics.

Gender Representation in the Faculty of Information Sciences

Perhaps, this is the only faculty with an almost progressive female student enrolment throughout the years since its inception in 1988/89 academic year. The female student enrolment ranged between 22.15% in 1989/90 academic year to 27.5% in 1993/94. This figure is still low in reaching parity in enrolment. More efforts need to be put in place to increase enrolment at the faculty.

Gender Representation in the Faculty of Social Cultural and Development Studies (SCDS)

This is the second largest faculty at Moi University in terms of student's enrolment after the Faculty of Education. The Faculty of Social Cultural and Development Studies began two years after the establishment of the Faculty of Education in Moi University. It consists of Departments such as Management Studies, Economics, Geography, History, Religion, Philosophy and English. The Faculty of Social Cultural and Development Studies is similar in many respects to Bachelor of Arts in the University of Nairobi. The Faculty of Social Cultural and Development Studies have shown steady female student progression from 1989/90academic year at 23% to 35.53% in 1995/96 academic year (Fig. 4.14). This is the faculty with the highest female student enrolment skewed towards Arts subjects means that the 8-4-4 system of education has, to some extent, plunged the female students to Arts cluster of subjects. This is very serious now that many of the Arts based courses are not marketable.

Gender Representation at the faculty of Health Sciences

This Faculty is different from the conventional medical school at the University of Nairobi in that it has a community approach to health. It is more concerned with preventive measures than curative. The graduate from this faculty is mainly concerned with working among a rural population. It is therefore interesting to see how gender is represented at this level. Female enrolment at this faculty will lead to role models in the society hence have an effect on the girls education in the areas of posting. The years under consideration here were 1993/94, 94/95 and 95/96. The year 1994/95 had the lowest female student enrolment of 15.25% compared to 19.0% in 1993/94 and 19.64% in 1995/96 academic years. This shows that female students are better represented than in the Faculty of Technology and Forestry Resources and Wildlife Management. However, this is still a low enrolment and needs to be boosted in order to be at parity with the male counterparts.

Gender Representation in the Faculty of Law

This is the latest faculty to be established at Moi University. The students in the faculty in the currents academic year (1995/96) are the first batch. This course is still marketable in Kenya today and graduates of this course form good role models for the younger girls in schools. The male students are 30 forming 78.95% while female students are 8 forming 21.05 per cent. At least this is not bad for a beginning. It is the hope of the researcher that as years progress, female enrolments shall also increase in order to be at parity with the male students.

The female student enrolment was quite low in the beginning years of Moi University. But as years went by, the female student enrolment has continued to improve. For example in 1987/88 academic year, the female student enrolment was 18.74 percent and in 1989/90 academic year, the enrolment was 25.59%. In the years that followed, that is 1993/94, 1994/95 and 1995/96, the enrolment was 28.55, 28.35 and 29.36 percent respectively.

These findings on gender representation in higher education, Moi University in Kenya, concur and disagree with several scholars. For example, Husen [42] notes that although the female share of enrolment increased from 32 percent in 1960 to 41 percent in 1992 in the world as a whole, this increase has since stagnated. Studies carried out in Elsalvdor reveal that female enrolment had at some periods overtaken that of male. In 1975, the gross enrolment ratio in the seven to fifteen age group for males was seventy six rising only to 77 by 1987. Female enrolment overtook that of makes rising from seventy three to eighty one [43].

Graham – Brown [44] notes that in Nicaragua, although enrolments rose for both sexes between 1974 and 1987, female enrolment overtook male. In this case, the government took clear initiative to promote education for boys after 1979. But both conscription into the army during the contra war and poverty, the tendency for boys to start working while young were also part of the reason [44]. In Botswana and Lesotho, girls outnumber boys at the lower end of the educational spectrum, and even at secondary and university level the numbers of women are substantial, compared with most neighboring countries. This is a historical trend due to the nature of the traditional cattle-rearing economy [44]. Hughes and Mwiria [45] observe that as is the case throughout Sub-Saharan Africa, women are dramatically under-presented. Kinyanjui [46] noted that, "As girls ascend from one level of education to another, their proportion of the total enrolment decreases by 10 per cent".

In 1986, women comprised 48 per cent of primary school students, 41 per cent of secondary school students, but only 30 per cent of university students [15]. The reasons for this poor performance are varied ranging from cultural beliefs and taboos, socialisation and poor quality schools for girls [47, 39], otherers are curriculum related and lack of models [47] and biased instructional materials [18, 48].

Perhaps most critical in this attrition of female students, are decisions made at the level of the individual family leaning towards cultural foundations. As long as resources are scarce, education priority is given to the boy child [49, 47, 50, 2, 21, 51]. In addition, in a patrilineal society, parents have a "greater claim on sons' income than on daughters'" [47]. Brokensha [11] suggests that in some rural settings parents fear that schooling will make their daughters discontent and even immoral. Parents of Swahili women are concerned about the compromises modern education may promote in their cultural and religious integrity [11]. In other cases, marriage may intervene [52].

The net result of these barriers is that women reach the highest levels of education in Kenya in very small numbers. Other studies done indicate that these broad participation rates hide even greater variation when enrolment is examined at the level of the individual faculty. For example, between 1976 and 1987, women constituted more than 51 per cent of the total Bachelor of Science enrolment or 4 per cent of the engineering enrolment. The poor representation of women in the sciences begins long before university. Eshiwani [33] reported the extremely high negative perceptions that secondary school girls have of science based careers such as engineering, dentistry, and agriculture. Such perceptions have persisted over the years. Men and women participate in very different proportions in these two programmes (Science and Arts).

SUMMARY OF FINDINGS

Results of father's educational background showed that male students were drawn from fathers who had lower educational level than their female counterparts. Results of mother's educational background indicated that male students have a big number of mothers without formal schooling, unlike their female counterparts and female students have a better representation in mother's education particularly at higher levels of education. Generally, this data shows that parents of female students have better education than male student's parents.

Data on students mothers occupations show that most of the student's mothers are peasant farmers. However, males students showed a higher representation here than their female counterparts. Female students have more numbers of mothers who are school teachers, small scale businesswomen and civil servants while male students have little representation in these occupations. This shows that about three quarter of male student's mothers are peasant farmers while female student's mothers are only half and the other half is scattered in other professions. This means that mothers have a strong influence on the girl Child's education. The educated mother increases the girl child aspirations for further education. This can be done by a mother being a role model for the child. Data on the father's occupations shows that male students have more fathers doing peasant farming than their female counterparts and female students have more mothers who are teachers than the make students. In general, it can be observed that female student's mothers have better representation in formal jobs than their male counterparts.

The classification of data on student's total family income per month was extracted from the 1995 economic survey [15]. The data presented here shows that both male and female students are mainly drawn from middle and upper income groups in our society. Data on the student's opinion on their socio-economic group indicated that more than 60% and less than 30% of males and female students respectively fall under

lower income group while the rest are in the middle and upper income groups.

A summary of the national standing in the representation of provinces in Moi university enrolment showed that Central province takes the lead in Moi University (partially in female student's enrolment). A further analysis in Central province shows that Nyeri, Murang'a and Nyandarua districts are over-represented in enrolment while Kirinyaga and Kiambu districts are well represented hence fall in the medium level category. Central provinces have got no district in the low level category. This makes it the most privileged province in Kenya with regard to Moi university enrolment. Coast province is the most under-privileged in Moi university enrolment. It has got no representation in the medium and high level categories of districts. All its six districts are in the lower level category. North Eastern province is also under-represented, after Coast province, it is only Mandera district that features in the medium level category while all other districts are within the lower level category of districts. A Gini coefficient of 0.49 shows a high inequitable distribution of students in the province. This has been clearly showed that Mandera presents more students to Moi University than all the other districts combined. On the other hand even if the Moi university student intake from the North Eastern province is low, its population is also low. However, from the calculations made, it still under presented in Moi university intake. A summary of the Moi university representation per province and the corresponding coefficients of equality show that some provinces are quite under-presented and some are over –represented. This finding concurs with the finding of Davis Court and Kabiru Kinyanjui [39] and Mwiria [53] which revealed that Central province was enrolling over 100% of the primary school age-cohort, with Coast, Rift Valley and North Eastern province lagging behind.

Total female student population during the 1995/96 academic year at the undergraduate level in Moi University was 32.7% only. This leaves male students with a representation of over 60%. Such a trend was similar in gender representation in most arts based courses. But in the science based courses female students were under-presented by big margins for example in the Faculties of Technology, Forestry and Wildlife Management and Health Sciences. Faculties of Information Sciences and Science (B. Sc) were fair because they had over 20% of female students forming the enrolment. The highest female enrolment to be recorded was in 1989/90 in Education Arts where 36.0% were female and 1995/96 academic year in the Faculty of Social Cultural and Development Studies where female students formed 35.53%. This information shows that women are dramatically under-presented in Moi University. This finding concurs withy he findings of Hughes and Mwiria [45].

CONCLUSIONS

The following concluding remarks can be made as deductible from the empirical results presented in this study.

- On regional representation it can be said that there are still wide disparities in Moi university enrolment. Some regions are over-represented while others are marginally represented. If such a trend continues, then Moi University will be for a few regions in the country hence denying other regions the opportunity to learn at this institution. It is true that the Moi university intake is purely done on merit but it is also good to ensure equity is done without sacrificing efficiency. Difference in Moi university intake were also found to exist within the provinces, a notable example is North Eastern province where Mandera district has less than a quarter of the population in North Eastern province but presents about three quarters of Moi university students from North Eastern province. If this trend continues, then we expect marginalization of other districts like Wajir and Garissa in North Eastern province. Another notable case is Mombasa district that has about 26% of the population in Coast province but presents over 40% of the students to Moi University. All these may be a pointer to the inequitable distribution of educational opportunities in the country and in order to achieve equality something must be done, not in lowering the entry marks to university, but in boosting those contributing factors to better performance in national examinations.

- Gender representation in this study revealed that female student enrolment at Moi University is quite low compared to make enrolment. The most affected faculties are Technology and Forestry Resources and Wildlife Management because the highest female enrolment at one time was 13.4% for Forestry and Wildlife Management and 6.38% for Technology. Other Science based courses had at least more than 20% of the female student representation. Even in the arts based faculties, parity is far from being achieved. This calls for concerted efforts to increase the female student enrolment at the university because of the benefits that come along with this level of education.

- On the socio-economic group representation at Moi University, there is also an under-presentation of low social groups. Although the measuring of socio-economic groups in low developing countries is hard, the researcher used parent's occupation, education and monthly income to gauge the socio-economic group. The level of monthly income, occupation and educational background are also deceptive because some parents have the university education but do not have the wealth and resources that go with it. On the other hand, some people may have basic education or no schooling at all but have

the resources and prestige that go with it. This pushes them to the upper strata of the social groupings. This is particularly true in the private sector. The Government of Kenya [15], has put it that anyone earning less than Kshs. 2,000 to Kshs. 8,000 and over Kshs. 8,000 is in the middle and lower socio-economic group respectively. Using this approach then it means that no schooling, lower primary, upper primary and junior secondary all fall under the low socio-economic group because their salary is below Kshs. 2,000. This makes up 71.63% and 53.01% for male and female students fathers educational background respectively while the rest falls in the middle and upper groups. The other finding on mother's educational background shows that 85.91% and 56.38% of the male and female students respectively come from the low socio-economic group while the rest form the middle and upper socio-economic groups. On the parent's occupation, it is the peasant farmer who falls under the low socio-economic group. Over 70% and 50% for male and female students mothers respectively are involved in peasant farming. The other occupations provide more than Kshs. 2,000 per month and therefore fall under middle and upper socio-economic groups. In fathers occupations 57.4% and 49.21% represent male and female students respectively.

This shows that almost 50% of the students are drawn from peasant background. The available information from this study, therefore, indicates that most male students are drawn from a lower socio-economic group while female students are drawn from middle socio-economic groups.

- The available information on gender, regional and socio-economic status suggest that as far as Moi university enrolment is concerned, equity objective has not been achieved.

RECOMMENDATIONS

This study has highlighted some inequalities that exist in Moi University. These inequalities were found to exist in socio-economic classes, region and gender. Since the government of Kenya is committed to reducing these inequalities at all levels of the education sector, some measures are important in achieving this.

The following recommendations are therefore made from the study:

- All universities and other institutions of higher learning should establish a "a data base" for all entering students. This will help in monitoring the kind of students that enter the institutions of higher learning and also assist in identifying needy students who need assistance of any form, from the institutions of higher learning , Higher Education Loans Board (HELB), bursary donor agencies etc.
- More efforts should be made in studying causes of poor regional performance in national examinations. This should not be left here; more efforts should e made to correct the imbalance because inequality in educational distribution leads to inequalities in earnings and standards of living.
- More efforts should be made in the provision of educational opportunities to the Arid and Semi-Arid lands because apart from Mandera, all other districts within ASALS fall in the low category of districts. This means that the participation rate of these districts is quite low and needs to be boosted so ha their performance in higher education can be improved. This can be done through the provision of boarding schools in ASALS for example, Garissa Teachers Training College. Besides this, textbooks, uniforms, buildings levies and other implements should be provided or heavily subsidized. Remedial education for children from disadvantaged areas should also be encouraged.
- The government should increase funding and bursaries to all groups under-presented at the university level. Financial resources are important in giving higher education to the affected people.
- Improve on the access to education at all levels for the girl child. This study has shown an under-presentation of the female students at Moi University. Efforts should be made by the government and the NGOs with particular reference to the education for the girl child. This can be done by giving more bursaries to female students or providing remedial education at all levels of education system.
- The government in conjunction with the parents and the NGOs should strengthen the learning institutions especially primary and secondary schools. This should be done through the provision of more classes, desks, toilets, staff houses and other faculties.
- Deliberate plans need to be put in place to identify potential candidates from disadvantaged areas who can proceed with their education to university level and assisted accordingly.

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