



NEW DIRECTIONS
IN AFRICAN EDUCATION:
CHALLENGES AND POSSIBILITIES

Edited by S. Nombuso Dlamini

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4

GENDER, POST-SECONDARY EDUCATION, AND EMPLOYMENT OPPORTUNITIES FOR WOMEN IN TANZANIA

Grace Khwaya Puja

ABSTRACT

This chapter discusses some of the many factors that contribute to women's low participation in post-secondary and technical education in Tanzania. The author explores how these limitations in education often mean women's employment opportunities in jobs that require technical skills and competencies are also limited. Historically, specifically during the colonial era, Tanzanian women were trained in home crafts, such as sewing, cooking, and cleaning. The author argues that Tanzania's postcolonial education policy structure and planning have played and continue to play significant roles in the systematic marginalization of women in post-secondary and technical education. Although many changes have taken place in education since Tanzania

became politically independent in 1961, women continue to be under-represented in post-secondary education, especially in fields that offer technical skills and competencies. This chapter discusses the limitations in current research examining women and education in the country; the author attempts to explain why there has been limited change in this field. She also suggests strategic interventions at the policy and structural levels that are necessary to lead to change in access for Tanzanian women. The author concludes by discussing a few initiatives that have been implemented at the University of Dar es Salaam and discusses how these initiatives could be enhanced.

INTRODUCTION

This chapter examines the factors that contribute to women's under-representation in higher and technical education and their subsequent limited employment opportunities. It is also argued that a gender analysis of the education policy will reveal how, over the years, women's subordination has been structurally engrained. It stresses the need for research that looks for alternatives to these educational policies so that education better promotes equity and improves women's employment opportunities. Literature on education in Tanzania fails to examine how gender is mediated by social class, religion, ethnicity, regional diversity, and disability. Nor does this literature analyze how patriarchal, colonial, and Eurocentric capitalist ideologies have combined with traditional patriarchal African culture to establish the education system we find in Tanzania today. A close examination of this literature discloses that, more often than not, low participation of women in formal education is blamed on the so-called traditional African parents who are said to be more likely to educate their sons than their daughters. While this may still be true for many rural parents in Tanzania, it has to be understood within a context. These parental attitudes partly reflect the colonial patriarchal heritage that rewarded male-based ways and suppressed indigenous and female ways of knowing and structural participation. In general, women's educational subordination has resulted from the complex combination of the colonial heritage, traditional African

practices, and external factors such as the International Monetary Fund (IMF) and the World Bank (WB), whose Structural Adjustment Programs (SAPs) define educational issues in Tanzania as they do in other African countries.

In Tanzania there is need for an approach that focuses on seeing the world from an African woman's perspective and that questions the way education is made available to women and men. This approach needs to be mindful of the intersection between gender and colonialism, underdevelopment, ethnicity, religion, and social class as sites that mediate African women's access to higher and technical education. Such an African-centred discursive framework validates African experiences and their histories and is conceptualized within an anti-colonial discursive framework as presented by Dei and Asgharzadeh (2001). According to Dei and Asgharzadeh, the anti-colonial standpoint affirms the reality of re-colonization processes through the dictates of global capital (popularly known as "globalization"). In his book, Rodney (1972) argued that Africa's underdevelopment state is a result of colonialism, the international capitalist system, and neo-colonial practices. Conversely, in colonial Africa, education was mainly designed to assist colonialists with the colonial process; consequently, it created stratification in the acquisition and valuing of resources in African society, and created conditions that led to unemployment, gender inequities, educational contradictions, and economic and political dependence. In order to be effective, the development process must begin by transforming the economy from its colonial externally responsive structure to one that is internally responsive. Accordingly, such a framework can also be utilized to examine and address issues of gender parity in Tanzanian education.

Writing from a North American context, Steady (1985) examines the subordination of Black women all over the world and advocates an overall cross-continental study of Black women in general. According to Steady, African women have, for centuries, experienced multiple oppression as a result of the intersection between gender, class, racial, cultural, and colonial experiences. She emphasizes that inequality between African women and men intensified during European colonialism, which, in itself was a direct product of the capitalist system introduced into Africa. Under the capitalist economic system, men's work is valued over women's work, which is seen as inferior and therefore unimportant.

WOMEN AND HIGHER EDUCATION IN AFRICA

According to UNESCO's 2003–2004 global monitoring report on Education for All (EFA), gender parity is better at the primary school level in the 128 countries that were involved in the survey (cited in Mugoni & Madziwa, 2004). A few African countries, including Botswana, Malawi, Mauritius, Namibia, the United Republic of Tanzania, and Zimbabwe, are said to have attained gender parity at the primary school level by 2000. The UNESCO report cites Swaziland as the only African country that had attained gender parity at the secondary school level by the year 2000. Factors that could contribute to this gender parity include Swaziland's small population (1.17 million), its boys-girls ratio, and labour migration of young men to South Africa. Overall, however, when compared to other countries, African countries, especially those in sub-Saharan Africa, still lag behind Europe, Asia, and Latin America in gender parity.

Girls' and women's under-representation in post-secondary education in Africa, especially in science-based and technological programs, and the related employment streams, has to be historically understood. For instance, in Tanzania Mainland, formerly Tanganyika,¹ at the time of independence in 1961, there were 490,000 students in primary school in the country's overall population of approximately 10 million (Omari, 2002). Discussing Tanganyika girls' access to education during this period, Malekela (1999) points out that in 1961 girls constituted 40 per cent of students in Standard 1 (first grade in elementary school) but only 23 per cent of students in Standard 7 (seventh grade). Due to the expansion of education after independence, these percentages slightly increased so that by 1971 girls constituted 42 per cent of the students in Standard 1 and 34 per cent of those in Standard 7. Increase in girls' enrolment became even more pronounced after the implementation of government initiatives designed to offer a more equitable education. Such initiatives include the 1974 Musoma Resolution aimed at offering Universal Primary Education (UPE) and the introduction of the Quota System, in mid-1970. By 1996 girls made up 49 per cent of students in Tanzanian primary schools (Ministry of Education and Culture, 1997).

Even though the percentage of female students has improved, especially at the primary and lower secondary school levels, girls' performance in secondary national examinations has been poor compared to that of boys. And, since secondary education is a ladder to post-secondary education, improvements in secondary school enrolments have not translated into the expected increase in candidates eligible for post-secondary education. Moreover, girls tend to drop out of secondary school due to hardships related to family income, pregnancies, or early marriages.

Examining access and equity in university education in Tanzania, Malekela (1999) points out that Tanzania Mainland has historically lagged behind Uganda and Kenya in higher education. While there were 374 Ugandan university students and 366 Kenyan university students between 1959 and 1960, there were only 185 Tanganyikan university students at Makerere² and overseas. Malekela cites the findings of a Manpower survey carried out in 1962, which indicated that 85 per cent of the jobs requiring a university degree in Tanzania Mainland were occupied by non-Africans: Europeans and Asians. Malekela agrees with Pratt that "there were only 12 civil engineers, no mechanical and electrical engineers, five chemists, one forester, nine veterinary doctors, eight electrical engineers and five telecommunication engineers, no geologists and only 38 out of 600 graduates were secondary school teachers" (Pratt, 1976, cited in Malekela, 1999, p. 36). While this breakdown does not indicate how many of these professionals were women, it is safe to conclude that they were probably all men.

The value of higher education is self-evident and is well discussed by Jones (1992), who points out that, due to the advanced technology prevalent in the world, the economic benefits of education are greater for those who are more educated and weaker for those who are less educated. Yet despite these widely acknowledged benefits of education, the situation for women in Tanzania has deteriorated as a result of so-called stabilization processes put in place by the World Bank (WB) and its associated Structural Adjustment Programs (SAPs). The WB introduced short- and medium-term loans, which force African governments to cut spending on social services. Furthermore, WB policies force African governments to spend less on education, resulting in the enforcement of systematic gender discrimination as girls and women were already denied access to post-secondary education.

When girls and women are denied full educational opportunities, they face limited employment opportunities and are consequently forced into low-paying jobs. The consequences are low social status and a poor quality of life, not only for women and girls, but also for their families and the societies from which they come. The World Bank has realized this drawback and is now partially funding the Primary Education Development Program (PEDP) and Secondary Education Development Program (SEDP) to address this problem. Nonetheless, this change comes a bit too late to effectively redress decades of gender inequity practices.

WOMEN'S EDUCATION IN TANZANIA

The Tanzanian formal education system follows seven years of primary school, four years of ordinary level secondary education, two years of advanced level secondary education, and a minimum of three years of university education. Pre-primary education was introduced in 1995 when it was formalized under the Education and Training Policy (United Republic of Tanzania, 1995).

Primary education was declared compulsory and universal as a result of the 1974 Musoma Resolution, which led to the enactment of the Education Act of 1978 in Tanzania. Although Universal Primary Education (UPE) has not yet been attained, the Musoma Resolution and other policy statements have led to increases in school enrolments at all levels. For example, compared to the 1971 statistics cited earlier, by 1988, girls made up 50.3 per cent of the total primary school enrolment, 36 per cent of public secondary schools, and 45 per cent of private secondary schools (United Republic of Tanzania, 1992b, p. 23).

In addition to these earlier efforts, in 2001 the Ministry of Education and Culture³ started the implementation of the 1999 Education Sector Development Programme (ESDP). At the primary school level, the Primary Education Development Plan (PEDP) was developed to implement the ETP, which was in line with international agreements on Education for All (EFA) such as the Jamitien, Thailand, in 1990, and the Dakar, Senegal, in 2000 agreements. Tanzania signed these

agreements. The PEDP aimed at attaining UPE in Tanzania by December 2006 (Ministry of Education and Culture, 2003). But, in her Budget Speech to the Parliament, the first female Minister for Education and Vocational Training, Margaret Sitta, in June 2006 states that in the 2005/2006 school year, only 74.6 per cent of the 7-year-olds were enrolled in Standard 1. She also discloses that the Ministry's target for 2006/2007 was to enrol 1,166,737 7-year-olds and all the remaining 8- and 9-year-olds. This implies that by December 2006, Tanzania had not attained UPE goals.

The selection procedures for secondary education are based on the students' results in the Primary School Leaving Examination (PSLE), which is done at the end of their seven years of primary education. Education records indicate that almost 50 per cent of primary school leavers in the country are selected annually for entry into first form (the first year of secondary education). Within the ESDP, this percentage is expected to increase. In the 1970s a quota system was introduced to address regional and district disparities as well as gender inequalities in the number of students entering secondary school.

The quota system involved using a selection procedure known as "cut-off points" for different districts and regions and for girls and boys in order to select diverse students for secondary schooling from various regional groups without competition. The quota system was criticized for claims of lowering the quality of education because, in some cases, students with low academic ability were selected from some economically disadvantaged regions, while others from privileged areas, who had better academic performance in the PSLE, were not selected. Although it was never officially stated, the quota system operated with the assumption that those from economically advantaged groups would go to private secondary schools. In addition to the latter academic standing controversy, and despite its good intent, the quota system was limited because it did not apply to the selection of students from Form Four to Form Five, which is based on the results of the National Form Four Examinations. Therefore, very few girls were selected for Form Five because their performance in the Form Four examinations was usually poor (Tanzania Development Research Group [TADREG], 1990; Tanzania Gender Networking Program, 1993). Such results indicate that there is a need to find out the conditions under which girls perform poorly in examinations and to suggest alternative strategies for change. This calls for a critical

analysis of the schooling process, the cultural and external factors, and how the intersection of these factors contributes to women's low academic performance and, consequently, to their under-representation in post-secondary education.

It is worth noting here that initially, the quota system was introduced as a remedial program to minimize the historical regional inequality in education and would have served as a short-term solution while causes for poor student performance were being studied. Later, by the late 1980s, the government agreed with those who opposed the quota system and argued that it had outlived its usefulness; thus, the quota system was abolished (United Republic of Tanzania, 1995). This decision was very problematic, considering that the regional, gender, and religious inequities that the quota system sought to minimize still exist in the Tanzania education system.

As a Tanzanian educator, I am convinced that the unstated reason for abolishing the quota system was to move away from the philosophy of education for self-reliance (ESR). The education for self-reliance philosophy, which advocated equality in education, was replaced by new educational policies that are market-oriented, emphasize privatization, and advocate cost-sharing between students and government. This new focus upholds the capitalist ideals that underlie the Structural Adjustment Program (SAP).

In addition to the abolishment of the quota system, another factor that has been detrimental to girls' access to education in Tanzania is the paying of school fees. School fees were abolished in the 1960s to allow more Tanzanian children to participate in education. But school fees were reintroduced in the late 1980s as a result of cuts in government spending. Public spending on education at this time was reduced from 11.7 per cent in 1980/81 to 5.9 per cent by 1989/90 due to pressure from the World Bank (Ministry of Education and Culture, 1990). Decisions on school fees have been sporadic, since in 2001, as a strategy to implement the Primary Education Development Plan (PEDP), presumably with the support of the World Bank, the Tanzanian government once more, and unexpectedly, abolished schools fees at the primary school level. The government also reduced the secondary school fees by 50 per cent from forty thousand to twenty thousand Tanzanian shillings. In addition, as a move to promote post-secondary education, effective July 2005, the United Republic of Tanzania, through its Ministry of Science, Technology, and Higher

Education (MOSTHE), established the Higher Education Student Loan Board (HESLB), which is responsible for granting loans to qualified Tanzanians to pursue post-secondary education locally and abroad. While this move is positive, most of these loan recipients may not easily find employment after graduation. Payment of the loans is therefore in obvious jeopardy.

GIRLS' ACADEMIC PERFORMANCE

There is documentation indicating that girls' final results in the Primary School Leaving Examination (PSLE), the National Form Four, and Form Six Examinations have generally been poor in comparison with boys (TADREG, 1990; Tanzania Gender Networking Program, 1993; Malekela, 1999). In boarding schools, girls' performance has been noted to be much higher than in day secondary schools where girls go back home every day to help with family chores. The report of TADREG (1990) also found that the examination results of female students from girls-only boarding secondary schools were better than those of boys in co-education secondary schools. The TADREG study concluded that "girls' best chances of academic success are in the public non-growth boarding secondary schools and their worst chances are in the fast growing private secondary schools" (p. 12). The TADREG report was in tune with observations that girls' best chances of academic success was in boarding schools. In general, many of the Christian-affiliated private boarding schools for boys and girls have been leading in good performance in national examinations since early 2000. In the 1990s the situation was different because, during this period when private schools were being reintroduced, most of the students enrolled in private secondary schools were those who were academically poor, resulting in high student-teacher ratio, a high number of unprofessionally trained teachers, and most of the private schools were poorly equipped. As a result, most of the students in private secondary schools did not perform well in national examinations. But the situation had changed in many private secondary schools by early 2000. For instance, in the 2002 National Form Four Examination Results, 10.5 per cent of the girls who obtained Division

1 (first class grades) were from single-sex girls' boarding secondary schools (some of these were private secondary schools), while only 0.8 per cent of the girls who obtained Division 1 were from co-education secondary schools (United Republic of Tanzania, 2003).

Girls in private secondary schools

The private school system in Tanzania was abolished immediately after independence as a strategy for eliminating racial and religious discrimination in education. In the late 1980s, it was reintroduced on the condition that those who started such schools had to follow curriculum and staffing guidelines set out by the Ministry of Education. Yet, despite these guidelines, evidence indicates that many private secondary schools had limited fiscal and staffing resources. Most of them had few and untrained teachers, although student enrolments were high. The official teacher-student ratio in private secondary schools by mid-1994 was 1:28, but anecdotal information indicated that some single-teacher classrooms had as many as sixty students. In public secondary schools, the teacher student ratio was 1:17. Subject streams in private secondary schools were also very limited due to scarce resources, especially classrooms, technical equipment, and curriculum materials (Tanzania Gender Networking Program, 1993). While the situation has changed in some private Christian secondary schools, some private schools still offer poor quality education while charging very high school fees.

Moreover, private secondary schools and boarding schools (including those that are public) are only accessible to girls from rich families, especially those in the urban areas who can afford to pay the expensive school fees. This implies that girls from poor families are denied the right to a better quality of education. By implication the development of the private education sector is instrumental in class formation in the Tanzanian society. In order to minimize social differentiation through education, the Tanzanian government should provide quality education in public secondary schools: both single-sex boarding and the growing co-education community secondary schools should be adequately equipped and have facilities such as hostels to ensure high quality education for girls and boys.

Girls and school curriculum

In 1967, the Tanzanian government, under the leadership of Julius Nyerere, declared Education for Self-Reliance (ESR) as its new philosophy of education (Nyerere, 1967). Among other things, this philosophy emphasized that the purpose of education was to prepare the student for a productive and sustainable agricultural life. Nyerere argued that Tanzania was an agricultural country and was going to remain that way for many years. He reasoned that the majority of primary schools leavers would not be selected for secondary schools and saw no other options for these children but to prepare them for work in the villages where they came from. Such a view of the role of education has been widely criticized, but the discussion of the angles of criticism is beyond the scope of this chapter.

In part, ESR was a step towards designing an education that is based on the needs of African children. Nyerere's views of ESR were based on non-elitism and an education suitable for preparing students for life in rural Tanzania. He argued that ESR was committed to the ideals of an African socialist society, which were based on the three principles of "equality and respect for human dignity; sharing of the resources which are produced by our effort; work by everyone and exploitation by none" (Nyerere, 1967, p. 6).

In response to the declaration on ESR, four vocational streams were introduced into secondary education in the 1970s – the agricultural, commerce, technical, and domestic science streams with domestic science focused on girls (Hongoke, 1991). Although girls did study agriculture at the ordinary level, this specialization did not exist at the advanced secondary school level. To date, very few girls enrol in technical subjects at the secondary school level. In the early 1990s, the Ministry of Education, Culture, and Sports introduced a system in which girls are admitted to formerly boys-only secondary schools, through which select government boys' secondary schools were required to enrol girls in these traditionally male-dominated subjects. While this move was a positive one, girls faced problems such as sexual harassment and a hostile social and structural environment, which they were forced to tolerate in order to study in co-educational schools.

Another response to the ESR was the introduction of academic subjects, which were divided into the arts and sciences. In this academic stream, evidence indicates that girls are under-represented

in the sciences, especially in the physics, chemistry, and mathematics (PCM) stream and in the physics, geography, and mathematics (PGM) stream. For example, in 1989, girls made up 11.2 per cent of the students enrolled in the PCM stream, but no girls were enrolled in the PGM stream. This was because there were no secondary schools designed to offer these subject combinations to girls (TADREG, 1990). This is just one example of the persistence of systematic structures that discriminate against the education of girls.

Another facet of girls' education is sexual and reproductive health education, which is a crucial component, partly because pregnancy is one of the reasons girls drop out of primary and secondary schools (Ministry of Education, 1984) or, as some have argued, the reason why they are expelled from schools (Makobwe, 1975; Kassimoto, 1987; Puja, 2003). Another reason why girls drop out of school is because of arranged marriages.

Sexual and reproductive health education is important in Tanzania because girls are also likely to be sexually harassed in the schools. Although sexual harassment exists in educational institutions, as it does in the rest of Tanzanian society, it was not adequately defined, studied, or addressed until 1998 when the Sexual Offences Special Provision Act was enacted (United Republic of Tanzania, 1998). Research indicates that girls' performance begins to deteriorate when they reach puberty since older boys, male teachers, and the public in general intimidate girls by focusing more on their sexual attributes than on their academic needs and performances (TADREG, 1990). I am not aware of any Tanzanian-based study that examines how girls' sexuality influences their academic performance and why Tanzanian educators and administrators spend more physical and monetary resources on how to control girls' sexuality and behaviour than in satisfying girls' needs for academic success.

WOMEN'S ENROLMENT AND SPECIALIZATION IN UNIVERSITY PROGRAMS

Despite the increases in participation of women at lower levels of education, according to government reports in the 1990s, the

participation of women at higher levels, like at the University of Dar es Salaam (UDSM) has not changed appreciably (United Republic of Tanzania, 1992b). In 1990 women students represented 18.78 per cent of student enrolment at the University of Dar es Salaam and 15.4 per cent at the Sokoine University of Agriculture (SUA). Combined enrolment figures for two public universities, UDSM and SUA, show that women made up 18.38 per cent of the total student enrolment; that is, among the 3,210 students enrolled in these universities only 590 of them were women (United Republic of Tanzania, 1992b). Enrolment figures in various degree programs also consistently indicated that most women students were concentrated in the social science and arts programs and were under-represented in the technical and science programs.

In the academic year 1993–94, women made up 27.69 per cent of students in the Bachelor of Arts, Education program and 18.55 per cent in the Bachelor of Arts general program. These were two of the few programs in which women's enrolment was high at the UDSM. In the other programs, there were either very few women or women were absent altogether. For example, in the academic year 1993–94, there were only seven women in the Bachelor of Science, Computer Program, two in the Bachelor of Science Geology Program, and another two in the Bachelor of Science Agricultural Engineering Program (United Republic of Tanzania, 1994). Similarly, most of the women enrolled in SUA in 1993–94 were in the Bachelor of Science, Agriculture General Program, making up 18.39 per cent of the total enrolment. There were only three female students in the Bachelor of Veterinary Medicine Program, and only one woman was enrolled in the Bachelor of Science Horticulture Program. No woman was enrolled in the Bachelor of Science Agricultural Engineering Program, which is offered in collaboration with the Faculty of Engineering at the UDSM (United Republic of Tanzania, 1994). Figures also show that the same trend of women's under-representation in higher education continues at the Open University of Tanzania, established in 1992. The tendency for many women to be enrolled in the BA Education Program is also revealed in these figures, which indicate that there were 40 women among the 359 students (11 per cent) in the BA program.

In contrast to other Tanzanian universities during this era, the Muhimbili University College of Health Science (MUCHS) had the highest women's enrolment in the country with 34 per cent female students in various programs (United Republic of Tanzania, 1994). Women's enrolment in the Doctor of Medicine program was the highest for all university programs in Tanzania, totalling 36 per cent in 1993–94, and, since medicine is seen as a male profession, it is interesting to note that the percentage of women in the Doctor of Medicine program at Muhimbili rose from 22 per cent in 1989–90 to 36 per cent in 1993–94. Therefore, there is a need to explore and effectively use the factors that have contributed to an increase in female undergraduate enrolment in this program. Overall, however, data from degree programs confirm that women are under-represented in most university programs and that this under-representation is more serious in the science and technological programs. According to the Ministry of Education and Culture (2003), women represented less than 5 per cent of students enrolled in engineering programs in Tanzania by the 2001–2002 academic year.

WOMEN IN TECHNICAL EDUCATION IN TANZANIA

Technical education in Tanzania has historically excluded women. While men were taught such skills as carpentry and masonry, women were taught sewing, cooking, washing, and ironing skills, which, at best, would prepare them to be housewives. This systematic gender-based discrimination is perpetuated by the educational policy-makers and planners in Tanzania, who give lip service to gender equity in the provision of technical education. An analysis of statistical data from the three technical colleges in Tanzania (Dar es Salaam, Arusha, and Mbeya) confirms that systematic gender discrimination continues to exist in technical education.

Statistical data for the periods of 1989–90 and 1993–94 show that women were not enrolled in some programs, including the Full Technician Certificate (FTC) in Mechanical and Civil Engineering. Women were only enrolled in FTC Electrical and Telecommunication and in FTC Laboratory Technology. The total enrolment for

Dar es Salaam, Arusha, and Mbeya Technical Colleges for the 1993–94 academic year was 1,826 students, of which only 118 (6.5 per cent) were women (United Republic of Tanzania, 1994), which confirms the dominant view that technical education in Tanzania is a “male subject” and is unsuitable for women.

Many factors contribute to gender inequity in post-secondary and technical education. One factor has to do with Tanzania’s social and cultural practices. In Tanzania, women’s voices are devalued and their problems are not seen as a priority; hence, their low social status. This perception of women is also reflected in the sexual division of labour, the pervasiveness of sexual harassment, and the type of educational policies and programs that are designed for female students. The sexual division of labour at home denies women students time for studies; consequently, most of them perform poorly in school examinations and are not selected for post-secondary education. These factors influence the way female students see themselves and their educational expectations and performance. There is a need for detailed studies that examine the extent to which girls’ participation in household chores affects their academic performance. This research should also examine how other factors such as early marriages interact with participation in household chores as well as with performance.

In Tanzania, girls are expelled from school if they are married early or become pregnant. In 1991, 45,487 primary school children dropped out of school and 48 per cent of them were girls. Among those who dropped out of school, 2,046 of them did so due to pregnancy (Tanzania Gender Networking Programme, 1993). Furthermore, although girls are sexually harassed at all levels of schooling, the effects of sexual harassment on their academic performance have not been adequately analyzed. Although Mosha (1991) established that sexual harassment exists at the UDSM, she did not explore how experiences of sexual harassment affect female students’ participation, their academic performance, or their future employment opportunities. Elsewhere, I argue that, unlike male students, female undergraduates in Tanzanian university campuses live and study under a very hostile environment, especially those enrolled in male-dominated programs such as engineering. They are also likely to experience four types of violence on campus: physical, structural, symbolic (including psychological violence), and everyday violence (Puja, 2003). It is

apparent that there is an urgent need to study how sexual harassment influences girls' educational and career opportunities at all levels of education in the labour market.

EDUCATIONAL POLICY FACTORS

To begin, some policy initiatives like the quota system that were aimed at improving girls' access to and success in higher education ended up producing the direct opposite results in that girls' performance in secondary school examinations did not improve and, in some regions, deteriorated. The basic problem with the quota system was that it was based on a deficit model, which viewed students as a problem to be managed. Streaming, or the vocationalization of secondary education, in the 1970s also contributed to the current gender inequity in higher and technical education by denying female students certain subject combinations and by streaming many girls into the Domestic Science/Home Economics or Human Nutrition, which did not prepare them for either higher or technical education. In cases where streaming allowed for entry into higher education, such as in the case of Home Economics and Human Nutrition at the Sokoine University of Agriculture, girls who specialized in this degree program had fewer and limited employment opportunities when compared with those who specialized in other science fields such as engineering and medicine.

Teaching resources in science and technology are also based on boys' or men's experiences. For example, the use of machines in teaching mathematics and physical sciences is based on boys' interests, further marginalizing female students who already feel alienated by the educational system. The absence of female role models and female mentors is yet another problem. Apart from the Teacher Assistance in Mathematics and Science (TEAMS) Project at the University of Dar es Salaam that was funded by the Dutch government, whose major goal was to increase the number of science teachers in Tanzanian secondary schools, most science and technical subjects in schools are taught by male teachers. Put differently, gender-blind policies deny female students opportunities to learn from positive female

role models. At the University of Dar es Salaam, for example, there are very few female academic staff members in senior positions, and the few that are on staff are mainly working in the social sciences. Information unveils that in 1993–94 there were only two female full professors at the University of Dar es Salaam, both of whom were in the social sciences. By the year 2000–2001, the situation had not changed considerably because there were only five female full professors compared to forty male full professors. But the number of female academicians slowly rises as one goes down the ladder from full professor to assistant professor to lecturer to tutorial assistant levels. In 2000–2001, for instance, there were twenty female lecturers compared to 169 male lecturers but there were only nine female assistant professors while there were 103 male assistant professors (University of Dar es Salaam, 2001).

EMPLOYMENT IMPLICATIONS FOR WOMEN IN TANZANIA

There is a direct link between education and employment for women. The 2000–2001 Integrated Labour Survey Analytical Report (United Republic of Tanzania, 2001b) states, among other things, that, in general, males in the country have higher average monthly incomes compared to females. The same report indicates that more men than women are employed in the Legislators/Administrators/Managers occupation category, a high-paying and high-status category that requires post-secondary education. Women's poor economic status has to be understood in light of their low level of education and their under-representation in post-secondary education. Galabawa (2005) clearly points out that women's economic benefits from education are limited by, among other things, the "unequal education opportunities at all levels of education system ... and those who receive education tend to choose areas of study which reflect the breakdown of occupations into male and female sectors" (p. 62). Consequently, the end results are labour-market earnings that are differentiated by gender.

The overall illiteracy rate for women in Tanzania is higher than that of men, and it contributes to the types of work done by women

and the incomes they earn. According to the 1988 Tanzanian Census report, only 0.06 per cent of employed women had an education and, of those employed, 0.3 per cent had a university education. The census report also shows that 55.88 per cent of the employed women had never been to school, while 33.25 per cent of the employed men had never been to school. Women's poor education translates into their annual cash earnings. In 1984, women's annual cash earnings in regular employment (public and private) were Tanzanian Shillings 1,091.7 million, compared to Tanzanian Shillings 6,275 million for men. The situation has not changed because, based on the findings of the Integrated Labour Survey Analytical Report for the years 2000–2001, the mean monthly income of males is higher than that of females (United Republic of Tanzania, 2001b). For instance, data on mean monthly income of paid employees by occupation and gender in 2000–2001 in the Professional occupation category was Tanzanian Shillings 94,606, while the mean monthly income of males in the same occupational category was Tanzanian Shillings 148,253.

NEW DIRECTIONS

Tanzania is cited as one of the African countries that has attained gender parity at the primary school level (Mugoni & Madziwa, 2004). This observation is supported by primary education statistics, which indicate that in 2004 girls were 50 per cent of the children enrolled in Standard 1 (first grade) in government primary schools (Ministry of Education and Culture, 2004). However, the transition rate from primary to secondary education is higher for boys than it is for girls. The existence of fewer secondary schools for girls than for boys, early and often arranged marriages, pregnancies, and many other factors all play into the difficulties faced disproportionately by women. For instance, in 2003, although girls were 50 per cent of the candidates who sat for the Primary School Leaving Examination, only 32.55 per cent of them passed (Ministry of Education and Culture, 2003). This gender gap in school performance calls for new strategies examining and addressing factors that contribute to girls' poor performance in national examinations to ensure quality education for girls aimed

at increasing their chances to pursue secondary and post-secondary education and expand their chances of employment.

Similarly, efforts should be made at the secondary school level to ensure that there are career-counselling services to enable girls to make informed decisions about subject choices leading to better career opportunities such as in high-paying professional jobs typically requiring science and technology expertise.

It is anticipated that, with the implementation of the Education Sector Development Programme (ESDP), especially through the Secondary Education Master Plan (SEMP), the Higher Education Master Plan (HEMP), and the Technical Education Master Plan (TEMP), which were launched by the Tanzanian government in 2003, there will be a new emphasis on the need to pay attention to mainstreaming gender at all levels of education.

One of the Tanzanian educational institutions that has made progress in taking gender into account is the UDSM, which has since the early 1990s taken special measures to alleviate the gender gap that exists at the university. As a result of a female student committing suicide at the UDSM in 1990 because of sexual harassment and other gender-specific issues, a Gender Dimension Task Force (GDTF) was formed in 1996. Among other things, the GDTF carried out a gender analysis of students' enrolment, staff recruitment, and gender awareness among the university community. Based on the findings of the study, gender issues were included in the University of Dar es Salaam Institutional Transformation Programme (ITP) known as UDSM 2000, which lasted from 1994 to 2000. Under the ITP, the Gender Dimension Task Force was upgraded into a Gender Dimension Program Committee (GDPC) that is chaired by the male UDSM Chief Academic Officer, who appointed a female academician to be the "Desk Officer." The GDPC has initiated and carried out a number of gender-specific initiatives, including the following:

1. The establishment of the Female Undergraduate Scholarship Program (FUSP);
2. The extension of the Pre-entry Program (PEP) that was originally meant for female science teachers to include female engineers and female undergraduates in medicine;
3. Gender-mainstreaming at the University of Dar es Salaam; which is "a commitment to ensure that all

women's as well as men's concerns and experiences are integrated to the design, implementation, monitoring and evaluation of all legislation, policies and programs so that women and men benefit equally and that inequality is not perpetuated... Gender mainstreaming is integral to all development decisions and interventions; it concerns the staffing, procedures and cultures of development organizations as well as their programs and it forms part of the responsibility of all staff" (Leach, 2003, p. 12).

4. The establishment of the Anti-Sexual Harassment Policy of the University of Dar es Salaam in 2004 (University of Dar es Salaam, 2006a);
5. The implementation of a proposed UDSM Gender Policy (University of Dar es Salaam, 2005); and
6. A proposed UDSM Gender Centre (University of Dar es Salaam, 2006b).

Another initiative of the UDSM aimed at increasing the number of female students is the lower "cut-off points" for female undergraduate applicants in various degree programs. This procedure implies that female applicants who meet the admission criteria but have one point less than male applicants, especially when there is high competition for places of admission, are admitted into the degree programs for which they qualify.

While these efforts of the UDSM are highly commendable, most of them are externally funded. For instance, the Female Undergraduate Scholarship Program is funded by the Carnegie Foundation of New York and the Pre-entry program and others are supported by the donor community with minimal financial commitment from the Tanzanian government and the University of Dar es Salaam. This implies that the sustainability of such promising efforts is in jeopardy once the external funding sources withdraw. In addition, these efforts should be linked to addressing how primary and secondary education play an important role in preparing students for university.

Moreover, the application of the lower cut-off points for female students should be used with care, and it should be viewed as temporary so as not to create an impression that girls' poor performance in national examination is either natural or permanent. Instead, efforts should focus on examining the root causes of girls' poor performance at the lower grades and suggest ways to eliminate or minimize them. There is also a need to address gender issues in post-secondary

education and employment opportunities in relation to other sites of differentiation in education that include regional variation (rural versus urban), religion, ethnicity, and the economy. Finally, the Ministry of Education and Culture should put in place a recruitment policy aimed at ensuring gender equity in employment, especially in areas where women are under-represented.

This discussion of gender, post-secondary education, and employment opportunities for women suggests that gender inequity in Tanzania exists at all levels of education but that it is more pronounced in higher and technical education. Gender inequity that exists at the lower levels of education lays the foundation for gender inequity in higher and technical education. In Tanzania, like in many African countries, the role of education, especially higher and technical education, in empowering women has not been well examined. Yet, existing literature indicates that factors contributing to gender inequity in higher and technical education are partly rooted in societal norms, colonial heritage, traditions, and beliefs about woman's role in society. These value systems are often not questioned, although they are reflected in the planning and provision of education in Tanzania at all levels, particularly at the post-secondary and technical education. Societal and historical factors interact with external factors such as the implementation of the Structural Adjustment Programs (SAPs) designed by the World Bank in collaboration with the International Monetary Fund and African governments.

These SAPs translate into educational policy reforms aimed at decentralization, privatization, and/or liberalization. Consequently, provision of education in Africa is directed not by the desire to promote social equity but by market forces whose major focus is economic benefit of international, regional, and local financial organizations.

There is need for further research on factors that inhibit women's participation in post-secondary and technical education from a gender perspective. Such a study would examine educational policy, planning and administration of education, the curriculum, and classroom processes. Such a study would also explore how power is negotiated as well as how issues of sexuality and gender roles are handled. Research has indicated that, in the Tanzanian social structure, women and girls are considered the inferior group with few or no economic resources, while boys and men are considered the superior group with wealth and power (Mushi, 1999). To break this cycle,

further research has also to focus on gender relations and the economic structure and how these two factors limit the education of girls from an early age. The research should also suggest alternative strategies to overcome structural barriers that limit women's participation in post-secondary education in Tanzania. The initiatives made by the UDSM should be emulated at the lower levels of education in order to examine factors that inhibit girls' and women's active participation in post-secondary education programs. There should be a more serious commitment by the Tanzanian government in terms of allocating resources and in ensuring gender is mainstreamed in education policy, planning, and administration.

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ABBREVIATIONS

BA Education	Bachelor of Arts with Education
EFA	Education for All
ESDP	Education Sector Development Programme
ESR	Education for Self-Reliance
FUSP	Female Undergraduate Scholarship Program
GDPC	Gender Dimension Program Committee
GDTF	Gender Dimension Task Force
HEMP	Higher Education Master Plan
HESLB	Higher Education Student Loan Board
IDM	Institute of Development Management
IMF	International Monetary Fund
ITP	Institutional Transformation Programme
MOEC	Ministry of Education and Culture
MOEVT	Ministry of Education and Vocational Training
MOSTHE	Ministry of Science, Technology and Higher Education
MUCHS	Muhimbili University College of Health Sciences
PCM	Physics, Chemistry and Mathematics
PEDP	Primary Education Development Plan
PEP	Pre-entry Programme
PGM	Physics, Geography and Mathematics
PSLE	Primary School Leaving Examination
SAPs	Structural Adjustment Programs
SEMP	Secondary Education Master Plan
TADREG	Tanzania Development Research Group
TEAMS	Teacher Assistance in Mathematics and Science
TEMP	Technical Education Master Plan
TGNP	Tanzania Gender Networking Program
UDSM	University of Dar es Salaam
UPE	Universal Primary Education
WB	World Bank

Notes

- 1 By 1961 Zanzibar was a British protectorate ruled through the Sultan of Oman. In 1963 Zanzibar became independent from the British but continued to be ruled by the Sultan of Oman until 12 January 1964 when there was a revolution. In the same year Zanzibar and Tanganyika joined to form the United Republic of Tanzania. The author has not come across the primary and secondary education statistics for Zanzibar for 1961. Moreover post-secondary education is a union matter. Therefore students in post-secondary institutions are either from Zanzibar or Tanzania Mainland.
- 2 Makerere in Uganda was the only existing university in the region serving the needs of mainly Kenya, Uganda, and Tanzania.
- 3 Effective December 2005, the “Ministry of Education and Culture” was renamed and changed to the “Ministry of Education and Vocational Training” (MOEVT) under the new Tanzanian government that came to power following the 14 December 2005 general elections.

