Interventions That Increase Enrolment Of Women In African Tertiary Institutions

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THE CONTEXT

On attainment of independence, African countries looked to their tertiary education (TE) systems to provide the much-needed 'manpower' to take up leadership of development efforts. The use of the term 'manpower' in reference to the human resource development role of TE in the early post-independence period underscores the historical male orientation of these institutions which reflected the colonial model on which they were based. Tertiary institutions were expected to educate and train males to replace departing male colonial civil servants. As such, female enrolment in these institutions was not at the center of the thinking in governments or in the institutions themselves. All the same, most African countries had little in the form of tertiary education. However, since the 1960s tertiary education in Africa has experienced considerable expansion both in terms of numbers of institutions and students. While there were 13 universities in Sub-Sahara Africa in 1960, there were about 300 by 2002 (Bennet, 2002). At the same time, in the 1970s to late 1980s, the general expansion of tertiary education benefited women more than men. By 1988, men's enrollment that had stood at 0.9 per cent in 1970 tripled while that of women grew sevenfold from 0.14 per cent[1] (Subbarao et al., 1994) and thus reduced the gender gap. Nonetheless, funding to this sector did not keep up with the expansion. In particular, funding agencies such as the World Bank extended only piece meal support to the sector (World Bank 2002). Instead, in the 1980s and 1990s more substantial support was given to primary and secondary education based on the argument that Africa's economic development was dependent on mass basic education. This followed economic analysis that had shown that investment in primary education yielded higher returns to society while investment in tertiary education yielded higher returns to the individual (Psacharopoulos 1993 cited in Subbarao et al., 1994). Other donor agencies have only more recently started to take an interest in tertiary education[2]. On the other hand, left to themselves, the predominantly male African tertiary institutions' managers had more urgent problems such as staff salaries, library resources and students' accommodation to give a thought to gender inequities in their institutions. In the circumstances, gender inequities in these institutions have persisted.

THE PROBLEM

There are three dimensions to the problem of low enrolments for female students compared to that of males: overall low enrolments; even lower enrolments at higher degree levels and in science, mathematics and technology (SMT) subjects[3]. Research studies that have analyzed and documented these gender inequities in different countries include: Francophone Africa - Assie-lumumba (1993) cited in Rathgeber (2002); Guinea – Barry (1995); Uganda – Etoori (1995); Tanzania - Masanja (2001); Senegal – Sow-Sidibe (1995); Nigeria - Onokala and Onwurah (2001); Ghana – Ardayfio-Shendarf (1995). These and

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[1] Enrollment ratios indicate the number of males and females enrolled in an institutions as a percentage of the relevant school age population – 20-24 years in the case of tertiary education.

[2] The announcement by the 4 American Foundations (Carnagie, Ford, Mac Arthur and Rockefeller) of a 'partnership to strengthen African universities' in 2000 signaled a renewal of interest in the sector.

[3] See Tables 1 & 2.

other studies have identified several constraints to women's enrollment in tertiary institutions. The major constraints include:

Inadequate qualified female candidates to join tertiary institutions. This is due to lower enrollment, higher drop out rates and poorer performance of girls at primary and secondary levels of education which result in only a small pool of female secondary school completers eligible for TE particularly in SMT subjects.

Insufficient places in TE institutions. In nearly all countries the demand for TE is much higher than the available places in the institutions.

Women unfriendly TE environments - owing to lack of mechanisms for dealing with sexual harassment for example.

Insufficient female role models. In many countries there are few highly educated women in leadership positions and professional careers to encourage girls to pursue TE.

Socio-cultural values, beliefs and practices that militate against the education of girls. These include less valuing of the education of daughters and the high value placed on marriage and motherhood and their accompanying gender specific roles.

High rates of unemployment of both male and female TE graduates. Owing to depressed economies in many African countries coupled with academic programmes that are irrelevant to the job market needs, unemployment rates for both male and female TE graduates are high. This does not encourage women students to strive to get into these institutions.

In this paper, I discuss the interventions that have been put in place to ameliorate the above constraints and thus increase women's enrollments in TE and those that though not specifically implemented to target women have contributed to raising their enrollment in different countries. Where information is available, I describe the procedures used in implementing the various interventions and assess the efficacy of the different interventions. In concluding the paper, I make some recommendations on what could be done to increase women's enrollments given what can be learned from on-going efforts.

It is important to point out from the outset that as Bennet (2002) has observed, the majority of tertiary institutions in Africa do not have any form of gender equity policies let alone interventions to increase female students enrollments. Further, where interventions are being implemented, little in the available literature shows that the impact the interventions are making is being measured or even the details of what the interventions entail, and the processes through which they are being designed and implemented.

THE INTERVENTIONS

1.   Affirmative Action (AA)

The immediate constraint to increased enrollments for females in tertiary institutions is that owing to the poor quality of girls' secondary school education in most countries female candidates perform poorly in the matriculation examinations whether these are the end of secondary level exams or special entrance exams for tertiary institutions. Consequently, few females attain high enough marks to compete on an equal footing with their male counterparts for the limited places in these colleges and universities. In response to this problem, many countries have instituted different forms of AA policies. Lower admission

cut off points and remedial classes for females are two of the more commonly used and more successful forms of AA.

(a)   Lower admission cut off points for females

To increase the number of women who enroll in tertiary institutions, some countries such as Ghana, Kenya, Uganda, Tanzania and Zimbabwe, among others, have articulated and implemented affirmative action policies. Such policies allow female candidates who have attained the minimum required marks to enter public universities at between 1 and 1.5 points (and 2 points in the case of Zimbabwe) below males (Chivaura, 2000; Joint Admissions Board, 2002; Mlama, 2001; Musisi, 2001).

Available literature indicates that in Uganda, the lowering of cut off points there referred to as 'awarding bonus points' was realized through the activism efforts of the Uganda Ministry of Gender and the Department of Women's and Gender Studies at Makerere University (Kasente, 2001 cited in Bennet 2002) beginning in 1990. Subsequently the policy was endorsed by the Uganda constitution in 1995 through Article 33, Section 5, which specifically grants women the right to AA. The existing national economic and political liberalization climate facilitated the establishment of the policy. In the University of Dar Es Salaam (UDSM), the AA policy was instituted in the 1997/98 academic year within major institutional changes – the UDSM 2000 Transformation Programme initiated in 1993. On the other hand, the University of Zimbabwe took the opportunity of the government's student enrollments africanisation programme to introduce AA.

Lowering cut off admission points for females has increased their enrollments in these countries. Through this policy, a total of 462 females entered the six public universities in Kenya in the current academic year (2002/2003). In Ghana, female enrollments increased from 21 per cent to 27 per cent between 1990 and 1999. In Uganda, female participation in Makerere University increased from 27 per cent to 34 per cent between 1990 and 1999 and in the UDSM in Tanzania, the increase was from 19.5 percent to 27 per cent between 1997/98 and 2000/2001 academic years.

However, while lowering cut off points AA intervention has increased women's enrollments, it faces the problem of acceptance. In UDSM as well as in Makerere lowering cut off points for female candidates has been resisted by both students and staff (male and female) (Mlama, 2001 & Musisi 2001). Critics argue that the university or other tertiary institution is a meritocratic institution and therefore allowing women to enter at lower cut off points than their male counterparts dilutes standards. They further argue that giving these concessions to women endorses the notion of women as the intellectually weaker gender.

Those who support the intervention on the other hand argue that the girls who enter the universities through this route first and foremost qualify to enter before they are considered under the scheme and that it is only due to the shortage of places that they would be otherwise locked out. Namuddu (1995) strongly argues for AA pointing out further that AA is not a gender activists' creation in post independence Africa since through Africanisation policies many men have got scholarships and or high status jobs through similar policies. She posits that many such men have gone on to succeed and observes that there is no reason why women would not.

(b)   Remedial courses

In some countries, instead of or even as well as allowing women to enter tertiary institutions at lower cut off points, remedial courses are offered for particular tertiary programmes or subjects. For example, in Eritrea, to increase the number of women teachers as a strategy for increasing access and retention of girls in primary schools, a bridging course for female teacher trainees has been implemented. Within this initiative, women who are interested in joining teaching but who lack the required academic grades for

admission into teachers' training programmes enroll for the bridging course at the end of which they are examined. Those who attain the required grades are admitted in the teachers' college (UNICEF 2002).

On the other hand, experience in Kenya and Tanzania has shown that owing to the very poor performance of female candidates in subjects such as mathematics and science, not even lowering cut off points will get them into the very competitive SMT related programmes in tertiary institutions. For example, in Kenya, in the current academic year (2002/2003) the Science and Technology Jomo Kenyatta University of Agriculture and Technology did not admit any of the 462 females who entered public universities through the lower cut off points policy and none of them entered the highly competitive courses such as medicine, surgery, dental surgery, pharmacy, engineering and computer science in the other universities (Joint Admissions Board 2002/3). In Tanzania, Masanja (2001) reports that in 200/2001 admissions, very few females qualified for admission into the engineering and science programmes in UDSM even after the lowering of cut off points.

Consequently, to increase females' enrollments in the highly competitive SMT related programmes, in some countries; remedial courses in these subjects are offered. The UDSM offers a six weeks remedial course in science and mathematics for borderline female candidates. Those who pass an examination given at the end of the course are admitted to the university.

In Kenya, a newly established (2003) private women only university, St. Lucie Kiriri Women's University of Science and Technology, is offering three months bridging courses in mathematics, English and physics with the objective of enabling female students attain entry qualifications for competitive SMT courses in the universities and other tertiary institutions. The courses are offered to female students who have met the overall mean grade criterion for admission into university but who do not meet the departmental requirements in mathematics, English and physics.

With liberalization of tertiary education, pre-university courses are now offered in private universities and in the self-sponsored programmes in public universities in Kenya and elsewhere in East Africa. While such courses do not necessarily target women, they do provide opportunities for women to raise their qualifications and subsequently enter tertiary institutions.

Remedial courses have increased the number of women enrolled in tertiary institutions. In the case of UDSM, for example, between 1997 and 2000, 214 female students entered highly competitive SMT related programmes such as engineering, medicine and architecture through this route (Masanja 2001). Masanja further reports that these females were performing well in their chosen degree programmes. She indicates that in a performance assessment administered to the 1999/2000 3rd year Bachelor of Science Bed programme cohort of students (among whom were the first batch of the remedial programme entrants), some of the remedial programme entrants were among the top 20 students in the chemistry or biology subject combinations. In fact, overall, they were found to be performing better than their direct entry male and female peers. Masanja (2001) reports further that faculties such as Physical Education Sports and Culture, Arts, Law and Nursing have easily attained gender parity in admission through AA policies – lowering of cut off points and remedial courses.

Remedial courses as a form of AA do not seem to attract as much controversy as the lowering of cut off entry points. They may also be more beneficial to the women candidates in that they could enable them fill in whatever knowledge gaps they may have in the relevant subjects. However, high user fee is a serious problem associated with the remedial courses intervention. When offered in private institutions and in the fee-paying programmes of public universities, remedial courses tend to be expensive and therefore inaccessible to the majority of would be beneficiaries. To overcome this problem, some tertiary institutions have found ways of offering them without charging any user fees. In UDSM, the intervention was initially implemented in 1997 with a two-year Forum for African Women Educationalists' (FAWE)

grant. Subsequently, the university mainstreamed the programme and no user fees are charged (Mlama 2001).

2.   Engendering Tertiary Institutions

As Rathgeber (2002) notes, African tertiary institutions were established and organized to meet the needs of male students. Consequently, in their culture and even in the infrastructure many of them are unresponsive to the needs of female students. For example, research from different institutions in different African countries has revealed that sexual harassment (SH) – ranging from constant derogatory verbal remarks to rape and other types of gender based violence – is perpetrated on female students by male academic and non-academic staff members, and students. Such research has been conducted in institutions such as: the University of Cape Town (EORP 1991); the National University of Lesotho (Mapetla 1997); the University of Botswana (Tlou & Letsie 1997); the University of Natal, South Africa (Ndinda 200); the University of Venda, South Africa (Nedohe 1997); Kenyatta University, Kenya (Gitobu 1994). Parents are generally protective of their daughters and are unlikely to encourage them to study hard to get into tertiary institutions they consider unsafe for them due to reports of SH.

Another area in which tertiary institutions are unresponsive to the needs of female students is in the lack of adequate numbers of women as academics and in the institutions' management to act as role models for female students. The few women who hold these positions are concentrated in the lower ranks of academia and management and in the case of the women academics are concentrated in arts based faculties and a few in the lower ranks of academia in SMT related faculties[4]. Consequently, SMT women students lack role models in this area even in the universities. As regards management for example, at the end of the 1990s, only 6 per cent of the universities of the African Association of Universities were led by women (Rathgeber, 2002). In Kenya, none of the six public universities is led by a woman[5]. In her analysis of data from member universities of the Association of Commonwealth Universities Lund (1998) found that only Cameroon, Kenya, Lesotho, Namibia, Nigeria, and Zimbabwe had one university each with a woman as the head of administration (Registrar/Secretary). However, Nigeria had five (out of 28).

Different interventions have been implemented in an attempt to make the tertiary institutions more women friendly. These include interventions to combat SH, providing appropriate accommodation for female students, establishing gender studies units and increasing the number and raising the levels of women academics and administrators.

 (a)   Combating SH and violence

Interventions to combat SH and violence have been the entry point of promoting higher enrollments for girls in South Africa where a national organ, the Southern Africa Network of Institutions Challenging Sexual Harassment and Violence was formed in 1997. Various actions have been taken in institutions such as the University of Cape Town, The University of Durban-Westville, The University of Venda and the Technikon Natal, Pietermaritzburg campus. In many institutions SH interventions were preceded by research on the problem. The research findings were subsequently used as a basis for SH policy formulation and outreach education (Bennet, 2000). Interventions used to address SH in South Africa's tertiary institutions for example include research on SH and sexual violence, articulation, popularization, implementation and monitoring of policies, support and counseling services for victims and/or perpetrators of SH, assertiveness training and esteem building programmes for women. In addition,

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[4] See Tables 3 & 4

[5] Private universities are doing better in this regard with three of them having women Vice Chancellors.

institutional structures for dealing with SH have been put in place. They include: Gender Equity Units, Gender Forums, Anti-Harassment forums, Women's Advice Desks, Gender committees and Gender Task Groups (Tudge, 1997). The Technikon Natal, Pietermaritzburg campus for example, has come up with a clear policy on SH that defines what is considered to be SH and three levels of recourse for victims – SH advisors, SH panel and the Technikon disciplinary structures with clear guidelines on composition and selection of panel members, functions and procedures to be followed by each panel (Haffajee, 1997).

As regards institutional structures for dealing with SH, there has been a debate about the more effective one among a gender studies unit whose core function is teaching and research, a general equity unit with responsibility for a variety of equity issues or a separate structure for addressing SH. Following a review of strategies for addressing sexual harassment in South African TE institutions, Tudge (1997) reports that institutions that had a separate structure for addressing SH were making better progress. However, dealing with SH requires research to fully grasp the situation viz SH in the institution and the impacts it is having on women's enrollments and activism to lobby for interventions to be put in place. Close collaboration among gender studies units and anti-SH advocates is therefore important.

Interventions dealing with SH face complex problems. For one, the largely male tertiary institutions' authorities are not enthusiastic about such initiatives. Writing on experiences in the University of Botswana, Tlou and Letsie (1997) report that for two years, a proposed anti-SH policy had not gone beyond the faculty discussion level owing to delays. On the other hand, SH is borne out of the unequal gender power relations in heterosexual relationships in the wider society on which femininity and masculinity norms, which promote men's subordination of women, are based. Many men and women in tertiary institutions have internalized these norms. Therefore men may not see themselves as perpetrating SH when they engage in offensive sexual behaviour towards women while women may consider forms of SH other than rape as their lot in life. Even when women have been raped, they may not report the crime for fear of being labelled sexually loose because of the widely held view that women ask for it by dressing provocatively for example. Further, sometimes, when female students report on SH incidents, they are pressurized to withdraw their complaints before any action is taken against the perpetrators (Mlama 2002). All these things make SH a very difficult problem to deal with or even monitor. However, writing on the experience in the University of Natal Mlama (2002), reports that following the implementation of the SH policy in 1994 by 2000, 18 cases of SH had been handled and more awareness created on the human rights of students. She concludes that the interventions put in place and commitment and persistence on the part of those working on combating the SH in different campuses are helping curb the problem.

(b)   **Women/gender studies /programmes/centers/departments**

The establishment of some unit to teach and carry out gender research with a strong component of activism for gender equity has been going on in African tertiary institutions. The idea has been to use the research findings as a basis for advocacy for gender equity. The Makerere University Women's Studies Department established in 1991 has played an important role in gender mainstreaming work in the university through, among other things, conducting gender-mainstreaming workshops for the top management of the university and others (Musisi, 2001). According to Bennet (2002) out of 24 campuses in African universities that have provided information in an on-going study, 18 have gender units, which undertake teaching, research and activism functions. Such units include those at the University of Ghana, at Ibadan University in Nigeria, Eduardo Mondlane University in Mozambique, University of Dar es Salaam and the University of the Western Cape, in South Africa among others.

The establishment of gender units in African tertiary institutions has followed different routes. While some were established for the purpose of driving gender advocacy through teaching and research, others such as the Women and Law in Southern Africa originated from the Faculty of Law in the University of

Zimbabwe. In the University of Natal in South Africa, collaborative development work between women academics and off campus non-governmental organizations (NGOs) led to the teaching of gender studies courses in the university (Bennet, 2002).

It is hard to tell whether or not gender studies units are making any impact on women's enrollments. However, they are producing considerable knowledge on gender issues in the institutions and elsewhere in the society all of which carefully interpreted and findings implemented in the form of interventions can increase females' enrollments.

(c)   Increasing the number and raising the levels of women academics and administrators

Interventions in this area have included:

- *Development of gender equity in employment policies* such as is articulated as objective 56 – to 'institute measures/recruitment policies to improve the staff-gender ratio'- of the UDSM Strategic Plan. The policy was part of the institutional transformation of the university referred to elsewhere in this paper.
- *Establishment of equal employment opportunity offices* (EEOs) such as was established in the University of Cape Town as part of the government of South Africa's policy of correcting gender and race imbalances of the Apartheid era. The office endeavors to promote equity for all irrespective of gender, race and disability through careful programming, which involves articulation of objectives, targets and monitoring and evaluation procedures (UNESCO 2002). Bennet (2002) observes that although the human resources officer responsible for equity sits on every selection committee, he/she has little influence. Consequently, little has been achieved in this area. UNESCO (2002) concurs with this evaluation.
- *Increasing the quantity and quality of women postgraduate students as an intervention for increasing women in faculty and university management* – strategies in this area include the application of AA in the award of postgraduate scholarships to qualified and interested females. This strategy has been used in UDSM. However, Masanja (2001) reports that the strategy has not been successful as young females with the right qualifications do not apply for the scholarships even after being solicited and persuaded. Instead, majority of applicants are older women in their 40s and in most cases without the required credentials. Perhaps Rathgeber (2002) is right when she argues that as part of their traditional culture, African women are under social pressure to marry and start a family. Younger women in Tanzania may be bowing to this pressure and foregoing graduate studies while older women may be under less pressure having nurtured their children to maturity. They can then devote time and energy to their career development but often find themselves age barred for the scholarships. On the other hand, even if academically qualified, some women may simply choose not to enter the struggle of the academic life given the odds and hardship likely to be faced. Indeed Kanake (1997) found that women academics in Kenya tend to leave the profession for more financially lucrative work with NGOs.

3.   Gender Sensitization

Engaging in activities aimed at increasing women's participation in higher education is really a transformatory undertaking since it involves trying to change people's beliefs about and attitudes towards women. Consequently, it calls for considerable education and re-education of the people about the gendered economic, social and political gender relations in the tertiary institution and in the society generally. This is done through gender sensitization seminars, conferences and workshops, which have been organized in most universities (Mlama, 2001). In this area FAWE has supported such activities in

several institutions including Chancellor College, Zomba, Malawi (FAWE 2001a) and Makerere University (FAWE 2001b).

As Mlama (2001) has noted, although the outcomes of these activities are difficult to measure, many people in tertiary institutions (and in society) are now aware about gender issues and even support gender equity in public though they may not act so in their private lives.

4.   Outreach Programmes

To a large extent, increasing females' enrollments in tertiary institutions generally and in SMT course offerings in particular is dependent on whether girls enroll in school and complete secondary level, what they learn in school (both as academic content and the gender values and attitudes they develop particularly with regard to gender stereotypes) and how well they learn it. Working with NGOs and other stakeholders, activist academic women participate in outreach activities to promote girls' education in schools and in the community. In addition, tertiary institutions sometimes host and provide conceptual and other leadership for girls' education research and development (R & D) programmes.

One such R & D programme is the recently concluded (2002) Female Education in Mathematics and Science in Africa (FEMSA) programme implemented in 11 countries throughout Africa with FAWE's support. The goal of the programme was to improve the participation and performance of girls in SMT subjects in primary and secondary schools in Africa. This was borne out of the realization that if girls are to be motivated and cognitively prepared to enroll in SMT course offerings in tertiary institutions (among doing other things with the knowledge and skills developed), there is need to intervene early in their SMT educational experience. Indeed, reporting on the six weeks remedial programme for female students in UDSM, Masanja (2001) reveals that in one cohort, 50 per cent of the girls were discontinued owing to their very poor performance in mathematics and physics. She concludes that six weeks were not enough to make up for deficiencies in these girls' primary and secondary levels' learning of mathematics and physics.

In Tanzania, Uganda and Swaziland, FEMSA was hosted in UDSM, Makerere and in the University of Swaziland respectively. The project activities for which women academics provided technical support included research, teacher training in gender responsive SMT teaching-learning methodologies, gender sensitization and confidence building.

Evaluation reports on the FEMSA programme are not available yet and therefore what impact it has had (will have) on women's enrollment in tertiary institutions in SMT course offerings is not known. However, verbal reports by the programme country co-coordinators indicate that the programme female students' interest and enthusiasm for SMT had improved (Oconnor, 2002).

The UDSM has also collaborated with FAWE in TUSEME [speak out], which has been taken over by the ministry of education after the initial phase funded by SIDA. The project aims at empowering secondary school girls so that they perform to their best ability (Mlama 2001). According to Mlama (2001) the project helped improve performance of girls at the 'O' levels and thus enabling them transit into the 'A' levels.

Without any monitoring and evaluation data, it is not possible to say for sure whether or not these outreach programmes are increasing enrollments of women in tertiary institutions.

5.   Expansion of Tertiary Places

Expansion of spaces in tertiary education is taking various forms. These are the opening of private universities and expansion of existing ones, the introduction of fee-paying programmes in public universities, and the introduction of flexible course offerings. Although these (except for women's only universities) do not specifically target women, they have been shown to increase their enrollments.

Women's only universities – In Kenya, girls' only secondary schools post very good performance even in SMT subjects. They are also regarded as safer environments for girls. These considerations have recently led to the opening of the already mentioned Kiriri Women's University for Science and Technology. Apart from the bridging course described elsewhere in this paper, the university is offering Bachelor of Science degree courses in mathematics and computer studies. Being a women's only science and technology university, Kiriri has targeted an area of great need – increasing the extremely low females' enrollments in these areas. Whatever number of female students chooses Kiriri for whatever reason will increase women's enrollment in SMT based programmes. Other African countries that have women's only universities include Ghana, Nigeria, Sudan and Zimbabwe.

All the same, women's only universities are controversial. In Kenya, there are those who think that separating women from men throughout their education is unwise as it creates an artificial environment and denies both the opportunity to interact across the genders.

Private Universities - Private universities provide much needed access to tertiary education for both men and women. For example, in Kenya, private universities take up approximately 14 per cent of the total number of students who qualify to join universities (Brown, 2001). Further, an on-going study on private universities in Kenya has found that in 2000, females constituted 52.5 per cent of the students in the four private universities under study (Wesonga et al., on-going). Clearly, private universities are increasing women's enrollment in TE having attained (and sometimes surpassed) gender parity. Factors that explain the high female enrollment rates in private universities include the heavy emphasis on arts and social science programmes for which there is a considerable pool of female secondary school leavers with the right qualifications and, parents' perception that these institutions provide safe and enabling learning environments for their daughters (Brown, 2001 and Wesonga et al., on-going).

On the other hand, few private universities offer SMT related courses and many are only beginning to offer higher degree programmes. Where science and technology courses are offered, as is the case with the University of Eastern Africa Baraton in Kenya, women students enroll mainly in stereotypical courses such as nursing. Consequently, private universities have not contributed much to addressing the problems of female enrollment in SMT subjects and in higher degrees. In addition, private universities are expensive and therefore inaccessible to the poor who are the majority in Africa. To address the problem of high costs of education in these institutions, in Kenya for example, students are awarded government loans just like those in the public universities. Individual universities also offer financial support in the form of scholarships and bursaries. However, neither of these two strategies targets women students specifically (Wesonga et al, on-going).

Fee paying programmes in public universities - *Public universities in Kenya, Uganda and Tanzania for example, have expanded their admissions to include self-sponsored students who would otherwise not have enrolled. Because these programmes have flexible scheduling of classes such as evening, weekend and school holiday options, they are able to attract mature students as well as school leavers. Consequently, the programmes have greatly increased enrollments in these universities. In Makerere University for example, in the 2000/2001 academic year, 80 per cent of the admissions were of self-sponsored students (Musisi, 2001) while in the 2001/2002 academic year, they constituted about 26 per cent of the admissions in public universities in Kenya of whom 40 per cent of were women compared to*

29 per cent in the regular group (Mwiria & Ng'ethe 2002). Clearly fee-paying programmes are increasing the number of women in tertiary institutions.

However, as is the case with private universities, the high cost of fee paying programmes in public universities may lock out many interested and qualified females unless they are given some form of financial support.

6.   Addressing Relevance of TE Programmes

The high level of unemployment of tertiary institutions' graduates is seen to be a disincentive for female (and male) students' enrollment in these institutions. One way in which tertiary institutions have attempted to address this problem is by designing programmes that equip their graduates with the knowledge and skills that are perceived to be relevant to their countries' human resource needs. In this venture, private universities see themselves as being somewhat successful. In Kenya for example, senior administrators of these universities and students argue that private universities attract many students because they provide 'marketable' courses and in turn produce 'marketable graduates'. Among the job market oriented courses that private universities offer are business studies programmes in which women students' enrollment is at par with that of the men (Wesonga et al. on-going).

However, as Brown (2001) notes, developing relevant academic programmes requires data on the human resource needs of the particular country. Lack of this information in most African countries is a major problem. In Kenya, private universities try to overcome the problem by conducting their own market surveys to establish need before introducing new programmes. However, more holistic programming requires more comprehensive information that is best collected through cooperation among TE institutions, government and industry (Brown, 2001).

From the foregoing discussion women's enrollment in TE, it is clear that there are no easy and quick fixes for increasing women's enrollments in tertiary institutions. Comparatively successful programmes such as are to be found in UDSM, Makerere University and in the University of Cape Town indicate that internal and external factors interact to impact on success in this area. Institutional factors that seem to contribute to success include the existence of committed and supportive leadership, committee structures and, gender advocacy and support groups. On the other hand, national socio-political and economic liberalization policies provide a good environment for interventions to increase women's enrollment in tertiary institutions. In the concluding parts of this paper, I offer some thoughts on what needs to be done in the form of recommendations and finally make some practical suggestions on what actors in a tertiary institution can do to improve the enrollment of women in their institution.

RECOMMENDATIONS

1. From the discussions in this paper it is clear that AA policies do increase women's enrollments in tertiary institutions. What needs to be done is to find ways of implementing them in such a way as to minimize the backlash on female students. In this regard, remedial/bridging courses are less problematic. However, any form of AA should be implemented only as a temporary measure to correct past gender imbalances.
2. Expansion of tertiary places has a direct impact on women's enrollment and should be pursued through private provision, self-sponsored programmes in public institutions, and diverse course offerings including flexible scheduling and innovative delivery methods such as by use of ICTs. However, expansion should be accompanied by curriculum review based on comprehensive information on the labour market current and future needs to minimize the problem of unemployment of graduates.

3. Combating SH – in addition to contributing to increased female students' enrollment, minimizing SH also ensures that female students and staff study and work in an environment that allows them to grow and succeed.

PRACTICAL SUGGESTIONS ON WHAT ACTORS IN A TERTIARY INSTITUTION CAN DO[6]

Individual institutions can (and should) develop their own programmes for increasing the enrollment of women. As much as possible, such programmes should be integrated within other institutional planning undertakings such as the rolling strategic plan. In developing such a programme the group of individuals or organization that takes leadership for the programme need to take several actions as follows:

1. Secure the support and commitment of the top manager – the vice chancellor or principle - and her/his team. As Mlama (2001) demonstrates, there are many adversaries to be faced and considerable resources expended in addressing gender inequities in tertiary institutions. Success will therefore require support from the top.

2. Build alliances with key mixed gender groups on campus to combat hostility, and avoid isolation, demonization or trivialization, and with like minded groups outside the campus such as those working in girls' education and gender and democracy issues to link on-campus activities with those in the wider community.

3. Collect information on the nature and magnitude of gender inequities in enrollment in the institution and their causes including the needs of different categories of women in order to gain a good understanding of the problems so as to be able to devise appropriate solutions.

4. Carry out gender sensitization for all category of workers and students including raising awareness among men and women of what is and what is not acceptable male behaviour.

5. Develop and popularize a comprehensive institutional gender policy to underscore commitment and to guide selection, implementation, monitoring and evaluation of gender equity strategies and activities.

6. Develop specific, appropriate and feasible strategies for enhancing women's enrollment in the institution.

7. Establish institutional structures such as gender committees, units and support groups with specific terms of reference and guidelines on procedures to be adopted to undertake the implementation and monitoring and evaluation of the interventions.

8. Articulate specific female enrollment targets and time frame for the attainment of gender equity to enhance continued focus and facilitate monitoring and evaluation. In addition, identify appropriate targets and time lines for the various interventions that will be put in place with the aim of increasing women's enrollment.

9. The shortage of data on interventions to increase female enrollment is a big problem in assessing progress. Collect and document information on what has been tried, the success it has had, the difficulties encountered and how they have been overcome. This will enhance evaluation and inter institution/country learning.

10. *Carry out monitoring and evaluation* of the strategies and activities implemented and the progress being made towards reaching gender equity.

11. UDSM, Makerere University and the University of Cape Town have mature gender equity programmes. *Seek to learn from them and others within and out of Africa.*

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[6] A detailed discussion on how a tertiary institution can go about programming for gender equity can be found in FAWE (1998).

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TABLES

Table 1: Gross Enrolment Ratios (%) for Tertiary Education in Africa

Country	Male			Female		
	1998/1999	1999/2000	2000/2001	1998/1999	1999/2000	2000/2001
Angola	1	1	…	1	1	…
Benin	5	6	…	1	1	…
Botswana	4	5	5	3	3	4
Burundi	1	2	2	1	1	1
Central African Rep.	3	3	…	1	1	…
Chad	…	2	…	…	-	…
Comoros	1	*1	…	1	*1	…
Congo	…	9	9	…	3	1
Cote d'Ivoire	10	…	…	4	…	…
Djibouti	-	*-	1	-	*-	1
Equatorial Guinea	…	4	…	…	2	…
Eritrea	2	2	3	-	-	-
Ethiopia	2	2	2	-	1	1
Gabon	10	…	…	6	…	…
Ghana	*4	4	5	*1	1	2
Guinea-Bissau	…	1	…	…	-	…
Kenya	2	4	3	1	2	3
Lesotho	2	*2	2	3	*3	3
Liberia	11	…	…	3	…	…
Madagascar	2	2	2	2	2	2
Malawi	-	…	…	-	…	…
Mauritania	…	…	6	…	…	1
Mauritius	8	8	10	7	7	7
Morocco	11	11	11	8	8	9
Mozambique	*1	*1	*1	*-	*-	*-
Namibia	7	5	…	8	7	…
Niger	…	2	…	…	1	…
Rwanda	…	…	2	…	…	1
Sierra Leone	…	…	3	…	…	1
South Africa	14	14	14	17	16	17
Sudan	7	…	…	7	…	…
Swaziland	*5	6	5	*6	5	5
Togo	6	6	…	1	1	…
Tunisia	*18	…	*17	*17	…	*21
Uganda	*3	4	4	*1	2	2

Source: UNESCO data base

Footnotes:
* UIS estimation; … Missing value; -   Magnitude Nil

Table 2: Female Representation in Tertiary Institutions in Sub-Saharan Africa

Country	Females as a % of tertiary enrollment, 1993	Females as a % of tertiary arts students, 1992	Females as a % of tertiary science students, 1992
Benin	-	14	11
Burkina Faso	-	28	11
Burundi	-	32	20
CAR	-	10	24
Congo	-	20	13
Djibouti	-	30	-
Equatorial Guinea	-	21	0
Ethiopia	-	27	11
Ghana	-	29	14
Guinea	-	7	6
Kenya	-	32	15
Lesotho	56	63	29
Madagascar	-	34	36
Malawi	28	20	27
Mali	-	15	12
Mauritania	17	18	15
Mauritius	-	48	21
Mozambique	26	28	24
Namibia	-	62	80
Senegal	-	26	32
Sudan	-	41	32
Swaziland	-	52	29
Togo	12	13	8
Uganda	30	32	18
Zimbabwe	-	37	17

Note: '-' = data not available
Source: SPESSA (Statistical Profile of Education in Sub-Saharan Africa – database compiled from World Bank and UNESCO statistics by ADEA and USAID) in FAWE 1998.

Table 3: Percentage Of Female Academics By Rank

COUNTRY	PROFESSOR	ASSOCIATE PROFESSOR	SENIOR LECTURER	LECTURER
Ghana	10	5.3	7.3	10.1
Kenya	0.0	0.0	12.7	12.3
Lesotho	0.0	0.0	16.7	26.8
Mauritius	0.0	11.8	22.0	40.2
Nigeria	5.0	9.5	12.6	17.4
Sierra Leone	0.0	0.0	33.3	17.5
South Africa	8.0	13.9	24.8	43.0
Swaziland	0.0	6.7	11.5	35.7
Tanzania	8.6	3.8	12.7	10.7
Uganda	16.7	20.0	7.7	18.0
Zambia	8.3	0.0	17.4	10.2
Zimbabwe	0.0	33.3	-	10.8

NB The status of Senior Lecturer does not apply.
Source: Compiled from data in Lund, H. (1998). A Single Sex Profession: Female Staff Numbers in Commonwealth Universities.

Table 4: Academic Staff in Science* Departments of Selected African Universities by Rank and Gender

Country of City	Professors		Senior Lecturers		Lecturers	
	M	F	M	F	M	F
Botswana	7	0	15	1	47	1
Ghana**	73	1	136	17	294	40
Nairobi, Kenya	111	3	139	15	289	40
Lesotho	9	0	15	1	22	2
Malawi	24	1	45	7	64	13
Ibadan, Nigeria	134	6	169	25	174	38
Swaziland	6	1	18	0	42	11
Tanzania	56	2	101	3	137	10
Zambia	26	3	36	0	178	21
Zimbabwe	35	2	70	10	181	38

Source: Makhubu 1998, 511. Compiled from Commonwealth Universities Yearbook, 1993 in Rathageber (2002).

*Science refers to natural sciences, agriculture, engineering, medicine and veterinary science.

**Combines data from Legon, Cape Coast, and UST Kumasi.