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**Mainstreaming Gender in Science, Technology and Innovation Systems
in the East African Community**

Executive Summary

I. Introduction

1. Globally, gender mainstreaming has been identified and accepted as a strategy for achieving gender equality, one of the most important Millennium Development Goals (MDGs). Previously, meetings such as the Fourth World Conference on Women held in Beijing in 1995; the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Forum for African Women Educationalists (FAWE) consultative meeting on Girls and Women in Science and Technology held in Arusha in 1997, the World Conference on Science held in Budapest in 1999, the African Union Congress of Scientists and Policymakers held in Alexandria in 2006 and the Extraordinary Conference of the African Union Ministerial Council on Science and Technology held in Cairo in 2006 all expressed similar views on gender parity in science engineering and technology education and employment.
2. The following factors explain the persistent gender inequalities: lack of relevant policies, inadequate curriculum content knowledge and teaching and learning strategies, poor didactic materials and negative culture and attitudes, which discourage women from training and/or working as scientists, technologists or engineers. This work strongly recommends that successful international best practices should be learned, adapted and wisely implemented in Africa.
3. Several initiatives have been undertaken to attract girls and women in science and technology education, including continuous sensitisation and lobbying of policymakers and legislators; promoting gender mainstreaming in policy and programmes; incentives such as scholarships, award systems; special internships for female students; career guidance and mentoring in institutions of learning, adaptation of curricula, and interaction with of teachers and parents.
4. In Africa, the strategies carried out for promoting gender parity include the Action Plan for the implementation of the Second Decade of Education for Africa(2006-2015); Africa's Science and Technology Consolidated Plan of Action for; launching of 2007 as the year of building constituencies and champions for science, technology and innovation in Africa, by the African Union Summit of the Heads of State and Government; the African Union regional conferences on women in science and technology in Africa and the African Union progressive gender policies.
5. Concerning the MDGs, thus far, the mainstreaming rates in societies differ across sectors, with science, technology and innovation lagging far behind, particularly in Africa, despite several mitigating measures and strategies undertaken. This suggests that efforts made by African member States and all stakeholders to achieve gender equity in science and technology required strong support. Concerning gender parity, sustained efforts are still needed to improve gender parity in science and technology and innovation activities.
6. The United Nations Economic Commission for Africa (ECA) sees this as an opportune time to review and initiatives undertaken and achievements made in East African Community (EAC) member countries, as a case study, to promote sound mechanisms for reducing gender disparities in science, technology and innovation in education and higher institutions of learning.

II. Objectives

7. The overall goal is to propose an approach for including gender disparities in all aspects of science, technology and innovation activities in the East African Community.

The major objectives pursued in this study include:

- a) Explicitly explain the objectives of gender empowerment and recognition in science, technology and innovation (STI) policy and programmes;
- b) Provide an overview of the status of gender mainstreaming in STI in the EAC;
- c) Disaggregate gender indicators and research in gender mainstreaming in EAC;
- d) Identify and share effective gender mainstreaming strategies and measures in STI policies, programmes, projects and structures in member States of the EAC;
- e) Develop an effective Gender Mainstreaming Action Plan (GMAP) for EAC.

2.1 Gender mainstreaming in science, technology and innovation in the East African Community

8. Many governments in the East Africa region have started addressing gender mainstreaming issues. Kenya, for example, amended its old constitution and promulgated a new one in August 2010. The new constitution, which promotes women's empowerment, will help in changing attitudes toward mainstreaming gender into STI. Decision makers started to notice the effects of gender mainstreaming in STI [education, performance and systems]. Increasingly, resources are being mobilized to support gender mainstreaming programmes and projects. Currently, the region only allocates 0.6 per cent of GDP to gender mainstreaming. Advocates of gender mainstreaming are optimistic that African Union countries will increase this to 1 per cent of GDP. The region's governments have consistently committed to mainstreaming gender without allocating the funds needed. Gender budgeting is also taking root in countries like Rwanda and Kenya.

9. A significant regional effort made to tackle this issue is the Gender Advisory Board (GAB) Regional Secretariat for Africa, hosted in Kampala, Uganda by the Association of Women Engineers, Scientists, and Technicians in Uganda. GAB was established in 1996 as a follow up to recommendations submitted to the 1995 Beijing World Conference on Women by the United Nations Commission on Science and Technology for Development (UNCSTD). Transformative actions, or strategic interventions identified by GAB from 1995 to 1996 and that are still valid include: (i) gender equity in science and technology education; (ii) promoters of gender inequalities in scientific and technological careers; (iii) applicability of science to societal needs (iv) inclusion of gender within the science and technology decision-making process (v) valuing indigenous knowledge systems; (vi) science, technology and gender ethics; (vii) availability of disaggregated data on gender for policy makers; (viii) gender equity in science, technology, engineering, mathematics disciplines (STEM) and innovation systems.

10. All African governments including those from EAC had signed the declaration establishing GAB and approved its transformative action plans in the last regional meeting held in 2005. Some key gender concerns identified during the East Africa Sub-region workshop held 14-16 March 2005 were:

- a) Lack of gender disaggregated data in science and technology at national and sub-regional levels in East Africa to help policy makers, programme implementers make informed decisions on resolving gender disparities in science and technology;
- b) Limited participation of gender-oriented stakeholders to articulate gender issues in science and technology policy review and formulation processes; hence most policies developed are not gender responsive;

- c) The gender mainstreaming of science and technology policy formulation and review processes have not been sufficient enough to reflect the level of gender awareness that has been created and attitude changes made. Thus, there are very few engendered programmes;
- d) The education system in East Africa is generally pyramidal with relatively equal number of enrolment of girls and boys at the lower levels followed by a steady decrease in of girls' enrolment at higher levels of learning, especially in science and technical subjects;
- e) Lack of coordinated mechanism for effective dissemination, networking and sharing of experiences in gender issues in science and technology education.

III. National activities in gender mainstreaming science, technology and innovation

11. The study reveals that, despite several positive initiatives undertaken through legal enactments, policies and programmes in place in East African Community member States, the level of women's participation in science and technology from primary through tertiary education, to the career level, is low compared to that of men. This situation is attributed to various causes such as: lack of clear policy guidelines on how to improve women's involvement in STI, lack of gender analysis expertise, women's reproductive roles, workload sharing between women and men, educational imbalances and unequal representation in decision-making positions, lack of role models, masculine stereotypes on science and technology, lack of data on gender, socio-cultural barriers, lack of equity on access to basic technologies, gender-insensitive curriculums and gender discrimination. It is recommended that achievement of gender parity in science and technology (education) should rely on an appropriate mix of strategies based on lessons learnt from best practises and experiences at national, regional and international levels.

IV. Summary of the situation in EAC member States

4.1 UGANDA

12. In Uganda, the articulation of gender needs in policy and programmes is still limited due to gender biases in the choices and actions in programming. However, there is increased proportion of women in decision making, which is evidenced by increased number of women parliamentarians and other women members who hold senior positions at the national, regional and International levels. The establishment of the Uganda Women's Parliamentary Association (UWOPA) has built emphasis on affirmative action, laws and policies. The National Gender Policy consolidates gender equality in decision making and further concretizes women's meaningful participation in political, social and economic development.

13. In general, women's presence in management positions in professional and technical spheres is small, indicating that women's opportunities are still very low (30.2 per cent) compared to those of men at all levels.

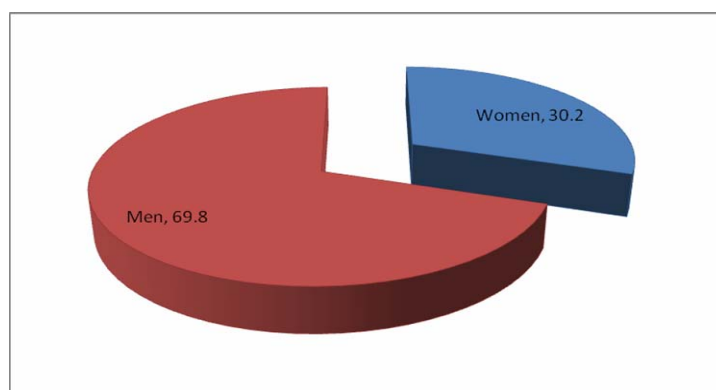


Figure 1 Women's presence in management positions in professional and technical spheres in Uganda

14. In terms of mainstreaming gender in STI, the national STI policy does not identify the lack of women's participation in science and technology as a challenge to developing the sector. It however specifies gender and equity as a guiding principle and states its commitment to enhancing the participation of women, youth, children, the elderly and other marginalized groups in science and technology development. The policy statement however calls on the State to mainstream and actively involve the special needs of groups, men, women, and children in all STI activities, in order to ensure that the resultant impacts are evenly spread across all sections of society.

STI Policy statement:

'intensify educational programmes that support the continued participation of girls in the field of STI at the secondary and tertiary levels of schooling in order to counteract the effects of other negative factors, such as teenage pregnancies and traditional gender stereotyped attitudes.'

15. According to the National Academy of Science in Uganda, women make up 41 per cent of the country's 890 researchers in the country women constitute 41% share in the STI and research development.¹ The national adult literacy rate among women is 63% for 2005/6.² Out of 5550 teaching staff in higher education in the country, women constitute 26% share.³

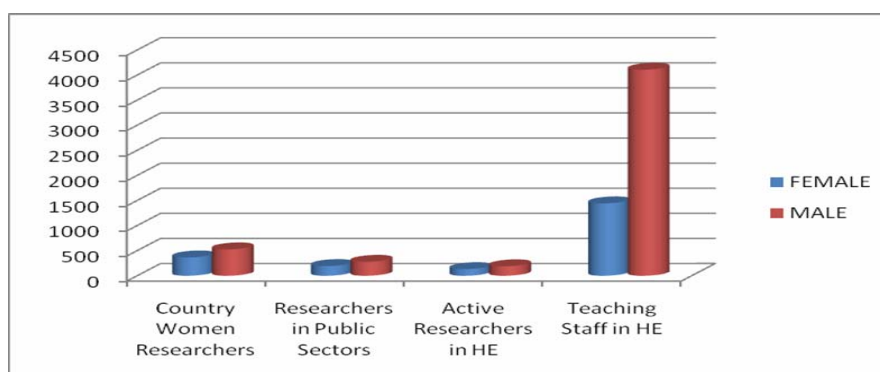


Figure 2 Uganda Report from the National Academy of Science on Mapping of Science and Technology and Innovation situation in the country

16. The national ICT policy approved by Cabinet in August 2009 also has a section on gender equity with specific strategies that support women and girls in STI⁴. The country encourages women to undertake research as a way of achieving parity and equal participation.

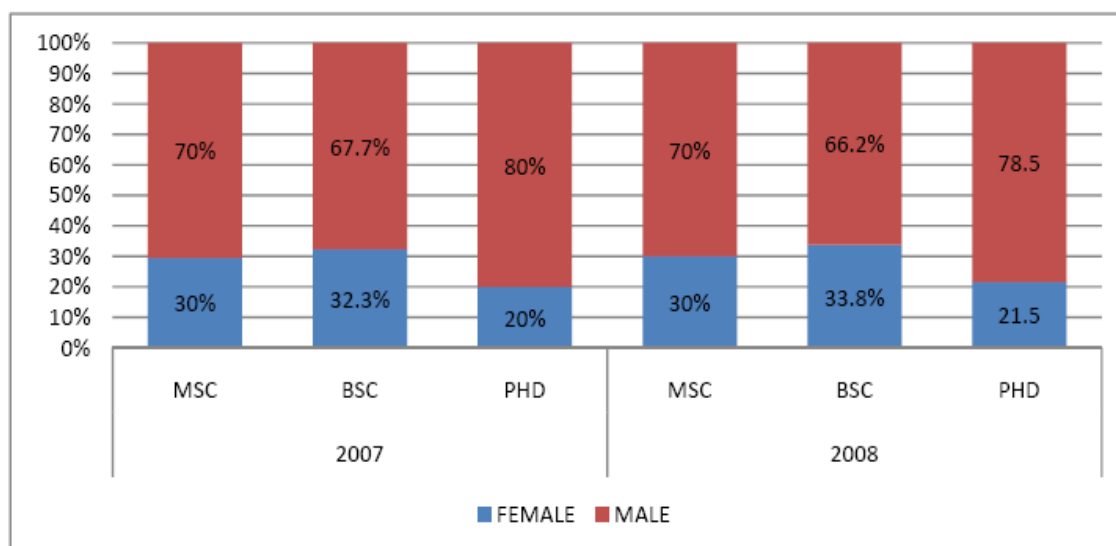
¹ UNCST, 2007

² UBOS, 2008

³ NCHE 2006

⁴ ibid

Figure 4.1 Gender Disaggregated Shares by Science Degree Level, 2007-2008



Source: ILMST 2009

17. In terms of science education, female enrolment is still disproportional, despite mitigating strategies like girl education, engendering curricula, guidelines for mainstreaming gender, gender-responsive teaching, learning materials and facilities, use of gender-sensitive language, rules, practices and ensuring equity in classrooms.

4.2 TANZANIA

18. The Government of the United Republic of Tanzania has identified gender equality as a key target of its national development programme.

19. Tanzania has several organs that address women and gender Issues. These organs include those run by the Government: Ministry of Community Development, Gender and **Children**, Ministry of Higher Education, Science and Technology/ and several NGOs such as Tanzania Gender Networking Programme (TGNP), Tanzania Association of Women Leaders in Agriculture and Environment (TAWLAE), Tanzania Women Miners Association (TAWOMA), Tanzania Media Women Association (TAMWA), Women Development For Science and Technology Association (WODSTA) and Women's Research and Documentation Project Association (WRDP).

Science, Engineering and Technology (SET) Programs for Women

Realizing the low representation of women in science and engineering as a major hindrance to global capacity building in science and technology, in 2002 the Ministry of Communication, Science and Technology (formerly the Ministry of Science, Technology and Higher Education) initiated an award for the best female students performers' in Science subjects namely, Chemistry, Biology, Physics and Mathematics examinations for Ordinary and Advanced levels schools. In 2004 the award was extended to public higher learning institutions and later in 2005 to both public and private higher learning institutions. The main objective of the award is to remedy gender imbalances in scientific careers by supporting women in S&T careers by awarding them grants and fellowships for education and research, as well as explicit recognition for outstanding achievements; Schools and teachers both Ordinary and Advanced Level secondary schools are also awarded for facilitating the performance of the best female science students. (Source: Ministry of Communication, Science and Technology)

20. Tanzania has a gender policy from which all policies derive their gender strategies. Tanzania's STI policy and strategies, which are currently under review, focus on the national STI agenda, the institutional legal and regulatory framework, human resource capacity development, STI funding, technology transfer and Indigenous Knowledge Systems, new and emerging

technologies, strategic collaboration and partnerships and cross-cutting issues with emphasis on promoting gender equity and female science, mathematics and technology education.

21. School enrolment figures show gradual improvement in girls' access to basic education. At independence, girls constituted 14 per cent of students enrolled in Form VI, the exit level in secondary education. By 1981 girls' enrolment in Form VI had improved to 22 per cent, and in 2007, girls accounted for 41 per cent of enrolled students. Meanwhile, a slightly different picture has emerged in institutions of higher learning. While from 2006 to 2007, 35 per cent of undergraduate students were women, women's enrolment in masters and doctorate programmes was lower, at 30 and 21 per cent respectively (BEST 2003-2007).

22. From 2006 to 2007, only 11 per cent of all academic staff in Tanzanian institutions of higher learning were women with PhD, while 20 per cent of all academic staff were women with master's degrees (Statistics in Higher Education 2007). The gender imbalance at the university level is more pronounced, especially in natural science and related faculties. At the University of Dar es Salaam, while female enrolment in the seventies was rather low (less than 14 per cent), it continued to rise slowly to 20 per cent in the early eighties. Some affirmative action had to be exercised by some women NGOs such as the TGNP in order to encourage female students to enroll in higher learning institutions especially after obtaining good grades at the General Certificate of Education Advanced level.

4.3 RWANDA

23. Rwanda has gained international recognition as a leader in gender equality, as evidenced by the country's high level of women representation in parliament - the highest in the world - and its commitment to gender equality in formal policy documents, such as Vision 2020 . The Rwandan Constitution provides for gender equity and makes provision for women's representation in Government. The country has also made considerable progress in mainstreaming gender into STI.

24. Rwanda has a Commission for Science and Technology, a Ministry of Gender and a gender observation unit. It has put in place mechanisms like public institutions and civil society organizations to further the promotion of gender equality and women's empowerment. Some of the public institutions are: The Ministry of Gender and Family Promotion; the National Women's Council; the Gender Monitoring Office; gender focal points; the Forum for Rwandan Women Parliamentarians. The civil society organizations include Pro-femmes/Twese Hamwe, which aspires to a Rwanda safe from all forms of gender-based discrimination, characterized by gender equality and equity in the development of a stable and peaceful society.

25. Rwanda developed a national gender policy and its implementation strategy that were effective from 2004. The national gender policy has a two-pronged approach: gender mainstreaming and empowerment of women. Gender focal points and the Gender Monitoring Office were set up as mechanisms of performance monitoring and raising awareness among actors on accountability. The Ministry of Gender and Family Promotion was established to coordinate the implementation of the national gender policy. There is active participation of women at different levels of decision making: at the central, level women senators account for 35 per cent, women parliamentarians 56.25 per cent, women Ministers 38 per cent and women State ministers 40 per cent.

26. In education, measures have been adopted to advance gender equality at all levels. Girls' participation in public higher education institutions ranges between 25 per cent and 27 per cent in Rwanda. Participation in science, mathematics and technology (SMT) subjects at secondary school level ranges between 5 per cent in technical subjects to 40% in biological and chemistry subjects while in overall SMT subjects, girls account for 35 Per cent. Even in planning and projections, the targets to increase the number of women in SMT are generally very modest.

Table Programme support of the education sector strategic plan, 2006 - 2010

Indicator	2004 Baseline Level	2008	2010
% girls enrolled in mathematics in secondary school	22	26	33
% girls enrolled in chemistry in secondary school	35	40	45
% girls enrolled in 1st year at tertiary level	20	25	30

Source: African Development Fund, Appraisal Report, 2006

27. In terms of the science, technology and innovation and integration of gender the perspective, programmes implemented to strengthen gender mainstreaming in STI include: (i) role model programmes and mentorship at the community level; associations for women professionals in science and technology visiting schools; (ii) scholarship award system for women who have given birth; (iii) research and networking; Butare University, for instance, provides research grants of up to 15 per cent for gender and women's studies and conduct continuous research on emerging issues in STI; (iv) local innovation funds; (v) awards to best performing students: Rwanda's First Lady awards scholarships to the top three girls in science and technology in secondary schools.

4.4 Kenya

28. The attempt by the Kenyan Government to mainstream gender was reinforced in 2000, when the Ministry of Gender and Sports developed the National Gender and Development Policy. Subsequently, the Government enacted the Sexual Offences Act in 2006.

29. In 2007, the Political Parties Act, No. 10 was enacted. It sought to ensure equal participation between men and women in politics and national decision-making. The following structures and mechanisms for the advancement of women were launched (i) National Commission on Gender and Development, (ii) Ministry of Gender, Children and Social Development; (iii) women's department; (iv) gender policy (adopted in 2009); (v) the Women's Enterprise Fund launched in 2007; (vi) gender desks and gender officers in all ministries and State corporations, especially at the police stations.

30. Kenya does not have a specific policy on gender mainstreaming in science and technology apart from some general provisions, which are not strong enough to mainstream gender equity into science and technology.

31. In education, the policy provides a framework for the planning and implementation of gender responsive education, as well as research and training at all levels, which encompasses gender equity and participation in science, mathematics and technology subjects and courses. This framework is underperforming. For example, in Kenyan universities, women's participation in science subjects is still gloomy although the trends show that there has been an increase, albeit unsteady.

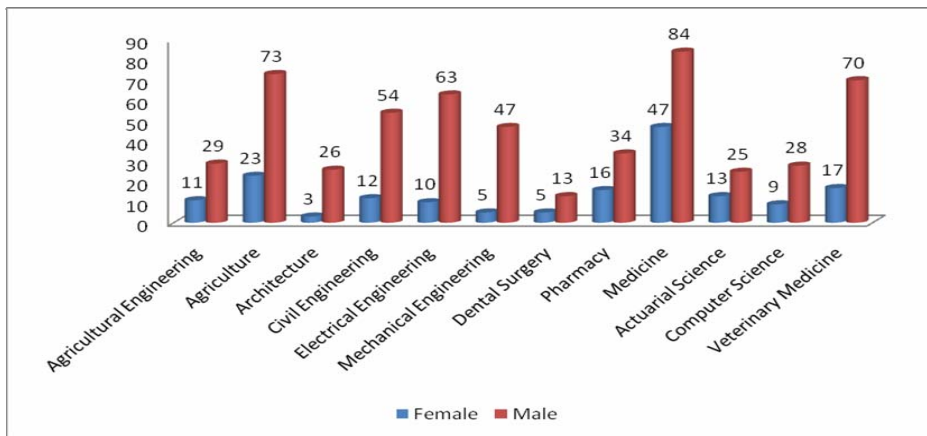


Figure: Number of KCSE candidates admitted at University of Nairobi (2006)

Gender mainstreaming STI governance

32. At the **University of Nairobi**, management is male dominated and all departmental heads are males (Fig. 20). There is no affirmative action (no lowering of entry points) for females at the medical school. The management has no commitment to gender mainstreaming at the department of medicine; yet, the university has had a gender policy since 2008. There are no gender considerations in plans, programmes and projects;

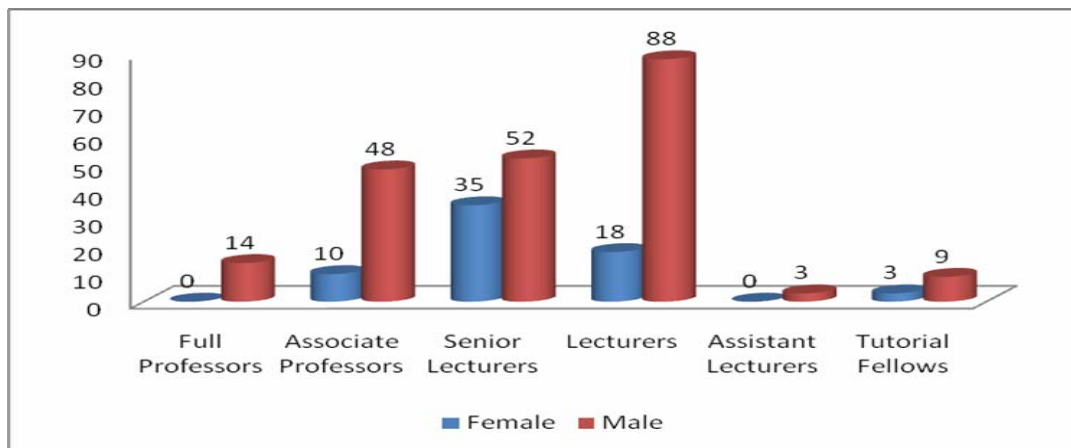


Figure 3: Number of University of Nairobi Staff by Title and Gender

Affirmative action

33. Affirmative action measures have been used by Kenyas public universities to increase access for women students. Since 2001, the Joint Admissions Board , the body that oversees student admissions to public universities, has lowered the university cut-off point (entry point) by one point for girls. The board has used its own discretion on where to put the entry point depending on overall student performance in the national university entrance examinations. This has sometimes, but not always, increased the number of women being admitted to university.

4.5 Burundi

34. In order to implement its constant commitment in gender promotion, Burundi introduced mechanisms to facilitate the translation of legal frameworks into action. These include the Ministry for National Solidarity, Repatriation, National Reconstruction, Human Rights and Gender, which was set up to ensure coordination of activities aimed at promoting gender at the national level and to undertake advocacy with the different development partners.

35. Other mechanisms are provided in the Constitution, namely, the National Gender Council, the Technical Committee of the National Gender Council and the Executive Permanent Secretariat of the National Gender Council. While acknowledging the importance of those mechanisms, adequate action should be taken to make them more functional and efficient once they are implemented. The current gender budget, which is a mere 1 per cent of the national budget for the entire Ministry, should be increased.

36. The establishment of gender focal points is an efficient mechanism for mainstreaming gender into organizations. However, they would be more efficient if their capacities were built.

37. Burundi has put in place legal frameworks for gender promotion. The **national Constitution** acknowledges equality between men and women and considers the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) to be its integral part. **The Arusha Agreement for Peace and Reconciliation** is another legal instrument that supports gender promotion, especially in terms of decision-making. It provides a minimum 30 per cent of women representation at decision-making levels, even though that principle is limited to the National Assembly (Chamber of Deputies and Senate) and the Cabinet. It is therefore worth noting that the other structures and institutions are not concerned with that principle. **The national gender policy** is another very important tool aiming at promoting gender parity especially in terms of its integration into the country's policies and programmes. Every Ministry is supposed to implement the national gender policy in its areas of intervention. **An action plan for the implementation of the national gender policy** is in place.

38. In higher education, the Government has established the scholarship loan system, but is faced with insufficient funds, and cannot therefore satisfy all the applications for admission to higher education. Despite the fact that efforts to solve education problems in general have been remarkable, the issue of women' and girls' under-representation is a sensitive one as they move from one level to another. Girls and women are less represented at the level of higher education. Statistical data collected for the four academic years over the period 2000-2004 are clearer about girls' under-representation, with 42.2 per cent of girls in general secondary education and 33.8 per cent in technical schools. Those disparities are huge in A2, A3 and A4 level technical schools, where girls' representation varies between 24.2 per cent and 37.3 per cent. Disparities become even more significant at the level of higher education. They are more strongly marked at the University of Burundi than in private universities. Indeed, out of the five academic years from 1999 to 2004, females accounted for 26. per cent, 27.8 per cent, 29.2 per cent, 30.5 per cent and 27.7 per cent. Statistical data do not show the profile of women's participation in science and technology, but the assumption is that gender-related disparities would weigh more against women. The Government of Burundi has taken measures to reduce disparities between men and women and that has borne fruits like free primary education and the construction of communal colleges.

39. Some positive actions include: (i) the establishment of a unit in charge of female education within the Ministry of Education has greatly contributed to reducing gender-related

disparities in primary education. Thus, the gap between girls and boys, which was 18 per cent in 1997 against girls narrowed to 6.4 per cent in 2002; (ii) free primary education and construction of communal colleges have had a very positive impact on girls' education; (iii) a girl's orientation programme was set up by the Ministry of Education to contribute to increasing the number of girls taking courses traditionally reserved for boys.

V. Gender mainstreaming in STI action strategy and action plan

40. *Policy Statement:* "Creating enabling environment for mainstreaming gender equity in science, technology innovation systems within the East African Community and in its member States, through a harmonized gender and STI framework"

41. *Principles:*

- (a) Gender Mainstreaming as defined in the Beijing Platform of Action 1995 is "a strategy for integrating gender concerns in analysis formulation and monitoring policies, programmes and projects".
- (b) One of the East African Community's specific objectives in the community gender and development framework is the mainstreaming of gender in all its endeavors and the enhancement of the role of women in cultural, social, political, economic and technological development;
- (c) Making men's and women's concerns and experiences an integral part of the design, implementation, monitoring and evaluation of science, technology and innovation policies and programmes in all sectors of society is key to creating an enabling environment for the East African Community's regional integration and the subregion's social and economic development;
- (d) Women and men should be given equal opportunity in Science, technology and Innovation systems in term of STI decision-making, conceptualization, design, management and utilization; with special focus on women or men in order to adjust the balance when necessary;
- (e) Measures, protocols and harmonized legislation should be adopted at the EAC level with a view to addressing institutional constraints to gender equality;
- (f) Integrating gender dimensions in STI policies requires integrating gender considerations all along the path of policy development and implementation, including policies that guide national and regional programs, the practices and strategies used to operationalize that policy, and the performance measures that determine effectiveness and impact (Sophia Huyer);
- (g) Member States of the East African Community recognize the imperatives and implications of gender considerations and gender mainstreaming as a priority.

Strategic objectives

42. The five strategies that can be considered at the subregional and regional levels include: gender responsive budgeting, policy formulation and review, gender disaggregated data,

affirmative action, use of role models, infrastructure development, legal sanctions, scholarship award system, research, awareness creation, school curriculum reform, networking, innovation and awards to best performing students/women scientists. Capitalizing on the above and ongoing efforts in some member States, the strategic objectives to implement by 2015 could include:

- a) Develop and adopt specific East African Community “Gender mainstreaming in STI framework and protocol”;
- b) Engender STI planning, governance and institution;
- c) Promote measures and reforms to ensure gender equity in science, technology, innovation and entrepreneurship training and education;
- d) Increase awareness and build capacity in gender parity in STI;
- e) Increase equal technological innovation and entrepreneurship opportunities for men and women.

Strategic objective 1: Develop and adopt specific East African Community “Gender mainstreaming in STI framework, and protocol”;

43. Outputs:

- (a) Use the current research study report to develop a comprehensive gender mainstreaming in STI harmonized framework;
- (b) Formulate and adopt EAC protocol/convention and measures for promoting Gender mainstreaming in STI at the subregional level and in a member States;
- (c) Formulate and adopt measures and a harmonized legal framework to enhance gender equity in the STI policy and system;
- (d) Organize a regional validation workshop to review the framework;
- (e) Submit the framework to the EAC governing institution for adoption.

Strategic objective 2: Engender STI planning, governance and institution

44. Outputs:

- (a) Establish and strengthen national, regional gender and STI coordination;
- (b) Re-establish the Gender Advisory Board section under the EAC committee on Gender and Community Development Framework and re-create the national GAB sections in member States;
- (c) Build capacity in gender analysis to facilitate planning for STI programmes and projects;
- (d) Increase the authoritative possibilities and equal number of women and men that have the requisite attributes for leadership positions from the top decision-making levels down to the grassroots;
- (e) Ensure the systematic application of gender-based analysis to all science and technology policy and programme activity and research institutions;
- (f) Promote the implementation of the seven UNCSTD transformative actions through the establishment of national programmes for women in science and technology;
- (g) Revise statistics and data-collection methods to ensure systematic and updated collection of disaggregated data on gender.

Strategic objective 3: Promote measures and reforms to ensure gender equity in science, technology, innovation and entrepreneurship training and education

45. Outputs:

- (a) Develop and adopt legislation and measures to encourage EAC member States to undertake strategic educational system reforms to better integrate science education at all levels and create conditions to attract more girls, young women and men to science and technology education and career;
- (b) Commission a SWOT (strengths, weakness, opportunities and threats) analysis of science education within the East African Community using gender disaggregated data and publish ECA guidelines on scientific skills requirements for the coming five years;
- (c) Create incentive for the enrolment of more young people in science education and periodically organize science essays, science awards, career guidance days, science role models showcase, etc.;
- (d) Increase the enrolment of women in undergraduate and graduate programmes in science and engineering in all EAC universities and colleges;
- (e) Promote the visibility of women and men scientists as accomplished role models, successful and recognized researchers in science and engineering, technology and innovation;
- (f) Establish Chairs on Women in Science and Technology at universities to act as focal points for mentoring women;
- (g) Develop incentive systems for teachers and administrators that reward gender transformative practices;
- (h) Establish and support networks of female professionals in science and engineering;
- (i) Support the production of more books, reports and other teaching aids with a gender balanced perspective, to cater to the needs of students at the university.

Strategic Objective 4: Increase awareness and build capacity on gender parity in STI initiatives/programmes/education**46. Outputs**

- a) Develop and implement awareness and capacity building and training programmes on gender mainstreaming in STI for decision-makers and gender focal points;
- b) Develop an information and knowledge repository on gender parity in STI status in member States and at the subregional level, to increase visibility of women and men in science, their publications to serve for career guidance and as a tool for gender analysis and monitoring of the implementation of the framework;
- c) Develop skills in disaggregated and quality STI data collection;
- d) Develop and implement a partnership and communication strategy with media institutions and practitioners to promote outreach and create community awareness on gender equity in STI; support a periodic publication on “Outlook EAC & STI Gender parity” and a special publication on STI and Mugs based on disaggregate data evidences;
- e) Empowering women and men in rural areas by promoting crossbreeding meetings, forums and science workshops;
- f) Promote and support the development of gender-sensitive associations and networks in science;
- g) Ensure that government-supported research institutions dedicate a portion of their funding to the consideration of the ethical, legal and social issues including systematic gender-based analysis;
- h) Conceptualize and implement regular gender-sensitive STI popularization programmes, including science camps, innovation days, science awards and mentoring programmes.

Strategic objective 5: Increase equal technological innovation and entrepreneurship career and education opportunities for men and women**47. Outputs**

- (a) Develop and implement gender-sensitive strategy, capacity building programme and legislation to strengthen IP regime in EAC member States;
- (b) Develop and adopt measures and incentives to increase private sector investment in gender sensitive and collaborative research and development programmes;
- (c) Encourage member States to create a special fund to support innovative enterprises and startups, with emphasis on women enterprises;
- (d) Adopt gender-sensitive measures and programmes to encourage and strengthen home-grown innovation;
- (e) Introduce and expand formal and non-formal gender-sensitive entrepreneurship training and requisite facilities;
- (f) Develop and implement capacity building programmes in the designing and formulation of attractive and bankable projects;
- (g) Ensure the preservation of local knowledge systems with attention to their gender specific nature (*Source: 'Transformative Actions' endorsed by the United Nations Commission on Science and Technology for Development, 1995*);
- (h) Acknowledge the contributions of indigenous knowledge systems to other science and technology systems, noting their gender-specific characteristics (*Source: 'Transformative Actions' endorsed by the United Nations Commission on Science and Technology for Development, 1995*).