## **Commission on the Status of Women Fifty-fourth session**

1-12 March 2010

Item 3 (a) of the provisional agenda

Follow-up to the Fourth World Conference on Women and to the twenty-third special session of the General Assembly entitled "Women 2000: gender equality, development and peace for the twenty-first century": implementation of strategic objectives and action in the critical areas of concern and further actions and initiatives: review of the implementation of the Beijing Declaration and Platform for Action and the outcomes of the twenty-third special session and its contribution to sharing a gender perspective in the realization of the Millennium Development Goals

"Access and participation of women and girls to education, training, science and technology, including for the promotion of women's equal access to full employment and decent work"

## **Moderator's summary**

- 1. On 4 March 2010, the Commission on the Status of Women convened an expert panel on "Access and participation of women and girls to education, training, science and technology, including for the promotion of women's equal access to full employment and decent work" in the margins of the session to provide an opportunity to raise issues to be considered in preparation for the priority theme of the Commission in 2011. Mr. Roberto Storaci, Vice-Chair of the Commission, moderated the discussion. The panellists were: Ms. Codou Diaw, Executive Director of the Forum for African Women Educationalists; Ms. Monazza Aslam, Research Officer at the University of Oxford's Centre for the Study of African Economies; and Ms. Annette Williams, Founding Director of the UK Resource Centre for Women in Science, Engineering and Technology.
- 2. Participants highlighted the many benefits of educating girls for both girls and society as a whole. The discussion emphasized that important achievements have been made in the past 15 years at all levels of formal education as well as in nonformal education. While not all countries are on track to meet the gender-related goals of 'Education for All' and the Millennium Development Goals, much progress has been made towards reaching gender parity in education. Gains made in education may, however, be jeopardized by the global financial and economic crisis, if funds are diverted from education to other sectors.
- 3. A number of barriers to girls' access to education remain. Poverty, in particular, constitutes an overarching obstacle. Other limiting factors include: living in rural areas or urban slums, belonging to an ethnic minority, or living with a disability. Other challenges affecting girls' participation in education include: cultural barriers, early marriage, teenage pregnancy, and violence against girls. These factors make it particularly difficult in some countries to retain adolescent girls in school. In addition, many children living in situations of armed conflict or in

post-conflict zones are excluded from education, and rebuilding efforts too often neglect social sectors such as education.

- 4. Among efforts to overcome such challenges, initiatives targeting economic barriers to education are of particular importance. Abolishing school fees is crucial, including for tertiary education, which remains unaffordable to many. Scholarships and school feeding programmes also have a beneficial impact. Other programmatic interventions have demonstrated the importance of taking into account the various constraints women face in accessing education. For example, a project on e-learning and distance education for women living in rural areas in one country was successful only after adding face-to-face instruction, child care services, transport to learning centres, and provision of food to the women and their children. Efforts to increase access to education should also harness the power of the media to tackle cultural barriers and raise awareness of the benefits of education for girls and women.
- 5. While access to education is a key issue, the policy focus should be broadened to encompass quality of education, which helps keep children in school. Quality of education has declined in a number of countries as access to education has expanded but funding has not increased concurrently. This is a paradox, as evidence suggests that school interventions promoting girls' education contribute to better educational quality. In addition, research indicates that in some countries with single sex schools, girls may receive lower quality education than boys.
- 6. Increased investment in the quality of education is urgently needed, particularly for countries that are facing a large inflow of girls at the secondary level, and must be tackled by all stakeholders, including communities. Teachers must be qualified, treated as professionals, and trained in gender-sensitive teaching methods, so that they have high expectations for both boys and girls and can raise awareness of gender issues among students. Quality education also requires relevant curricula and materials, as well as a focus on critical thinking and pragmatic competencies.
- 7. Despite progress in women's educational attainment and labour force participation in many countries, women continue to opt for a relatively narrow range of occupations, and they remain substantially less paid than men. Exploring how the rewards to women's and men's schooling differ may help shed light on these differences. The extent to which an additional year of education raises earnings can serve as a measure of the return on investment in education. Evidence shows that the return curve is convex that earnings increase sharply at higher educational levels and that overall, the return to education is higher for women than men. While research has traditionally found the return to differ between women and men at different levels of education, with a lower return to primary education for women, recent studies in some countries have pointed to a higher return for women than men at all education levels, and to a growing gender gap, to the advantage of women, at higher education levels.
- 8. This gap may be due to a shortage of women in certain skilled professions, which would translate into a salary premium for qualified women. Another explanation would be that women who access higher education are more able and motivated than other women, and that the higher return on education is a return on ability or motivation, which may not be found among men as

they face less barriers to higher education. Yet another reason could be that educated women are better able to counter discrimination in the workplace.

- 9. The gender gap in gains on education has important policy consequences. For instance, while primary education is critical to acquire literacy and numeracy skills, and to progress to higher levels of education, parents have a disincentive to send girls to school in countries where the return to investment in primary education is lower for women than for men. Moreover, the low supply of education to women in many countries, despite a higher return for women, points to institutional failures. The lack of state-provided old-age support may lead parents to invest in boys' education, as any economic benefits of girls' education would be reaped by in-laws.
- 10. Policies are needed to help absorb a growing supply of young educated women into the workforce. While women are more educated today than ever before, they are also more likely than men to be unemployed or to exit the labour market prematurely. The need for interventions targeted at young women is pressing, all the more so in the context of a global economic crisis. Demand-driven skills training programmes have proven successful in parts of Latin America. In countries where women face a broader set of obstacles, programmes that apply a 'livelihoods approach' may be better suited, as they address not only the need for skills but also constraints such as the lack of child care facilities or limited mobility. More generally, policies supporting women who have children are needed to ensure that they do not leave the labour market or that they return after breaks for child care.
- 11. Policies should also address issues such as the limited representation and participation of women in decision-making positions in both the public and the private sector. In addition, there is a need for policies to combat the prevalence of negative gender stereotypes, which lead some employers to discriminate against female job applicants, constrain women's professional ambition and result in occupational segregation.
- 12. Occupational segregation is particularly visible in science and technology. Women remain underrepresented in these fields, both in tertiary education and in employment. The underrepresentation of girls and women in science, engineering and technology starts early and worsens at each stage of the vocational and professional career ladder. Women accumulate disadvantages, including in early choice of field of study, recruitment, retention and promotion. Women who participate in scientific and technical fields tend to opt for careers associated with health and caregiving, with women predominating in sectors such as medicine and bioscience, and absent from engineering or computing in a number of countries.
- 13. Girls' career aspirations and choices are influenced by a range of factors, including gender stereotypes about which occupations are considered appropriate for girls and women. Science, engineering and technology are perceived to be a masculine territory and an unsuitable and uninspiring career option for girls. Barriers to successful careers in science, engineering and technology continue into vocational and higher education, where the learning environment can be hostile for girls, with teachers holding higher expectations of boys and giving them more attention and praise.

- 14. Attrition of women from science, engineering and technology is particularly severe in the transition from university to employment. Women often face structural and institutional barriers in academic and research careers, such as lack of transparency on pay and promotion procedures. Women also pay a career penalty to care for their children, due to lack of provision for part-time work or flexible delivery of research contracts.
- 15. Occupational segregation makes no economic sense, particularly in light of the shortage of scientists that a number of countries face. Women's underrepresentation in science, engineering and technology limits scientific development, productivity and excellence and has a negative impact on economic growth, which is increasingly driven by technological innovation. Evidence suggests that diversity in teams enhances productivity and output. As decisions on research agenda are predominantly taken by men, the issues that are important to women may be neglected. The underrepresentation of women at senior level also impacts on the career aspirations of young women, offering few role models with which they can identify.
- 16. Governments' involvement is crucial in efforts to increase women's access to and participation in science, engineering and technology. Government initiatives can include legislation, quotas and equality standards to support institutional and cultural change. However, the underrepresentation of women in the science, engineering and technology workforce in countries with good gender equality legislation illustrates that this problem cannot be solved with legislation only. The establishment of resource centres to implement national strategies to increase the participation of women scientists and engineers, to provide leadership and create knowledge repositories to share good practices have shown some good results.
- 17. A coordinated approach that involves all stakeholders in education and employment is essential to the creation of an enabling environment for women to have fulfilling careers and enjoy the benefits of participating in science, engineering and technology careers equally to men. Such an approach is necessary to ensure that gains in one area are not undermined by policies in other areas. In this regard, the need for partnerships, in particular between Governments and the private sector, was emphasized.
- 18. Initiatives that can help increase women's representation in science, engineering and technology include gender-responsive teaching and gender targets. Girls' interest in these subjects can be enhanced through development of practical skills, mentoring and exposure to role models, as well as science fairs and field trips to high-tech companies. Women teachers, in particular, play a key role as mentors to create expectations among girls to succeed.
- 19. While the focus on expanding women's access to science, engineering and technology in education is crucial to increase the supply of qualified women, particular attention needs to be paid to the retention and career development of these women. Initiatives that focus on leadership training, mentoring, and supporting a healthy work-family balance, are necessary but not sufficient to increase women's progression in this field. It is crucial to also address the institutional barriers and gender stereotypes at all levels of education and in employment.
- 20. Participants raised a number of additional issues to be considered in preparation for the priority theme in 2011:

- The impact of child labour on girls' access to and participation in education
- The need to engage communities in the elimination of gender-based violence at and on the way to/from school
- Ways to address the specific needs of vulnerable girls in the classroom, including girls from ethnic minorities or girls living with disabilities
- The importance of a rights-based approach to gender equality in the labour market
- Strategies to involve men and boys in the promotion of women's and girls' participation in science and technology
- The role of the media in reinforcing or challenging gender stereotypes, particularly with regard to women's access to science and technology
- Measures to increase women's participation in trades (for instance builders, plumbers and electricians)
- The participation of Ministries of Education and student unions in the fifty-fifth session of the Commission on the Status of Women.