



New York, 22 February - 4 March 2011

Commission on the Status of Women

to promote women's and girls' access to education, training, science & technology

The 55th session of the Commission on the Status of Women will take place in New York from 22 February to 4 March 2011. During these two weeks, government officials, representatives of the United Nations and civil society, the media and the private sector will meet at United Nations Headquarters to share experiences and good practices, as well as agree on priority actions to deal with continuous obstacles and new challenges to the implement-

ation of the Beijing Declaration and Platform for Action in order to accelerate progress towards equality between women and men.

The priority theme of this year's Commission on the Status of Women is "Access and participation of women and girls in education, training, science and technology, including for the promotion of women's equal access to full employment and decent work."

Why is this priority theme important?

Education is a basic human right. It also is a key driver of economic growth and social change. It is a basis of women's empowerment. Investing in women and girls has positive multiplier effects on the wellbeing of their families, their communities and nations.

Science education is an essential part of education. The global economy

is increasingly knowledge-driven, and requires an educated workforce able to apply existing technology and to develop new science and technologies to combat poverty and adapt to emerging issues such as climate change.

Ensuring that women acquire the necessary skills and competencies in science and technology is an economic

imperative; it also empowers women and girls to make informed decisions on critical aspects of their lives, including their health.



United Nations Entity for Gender Equality
and the Empowerment of Women



Improving the quality of education and combating gender stereotypes

In recent years, significant progress has been achieved in women's and girls' equal access to education at all levels. But this achievement remains restricted in many parts of the world, particularly in sub-Saharan Africa, Western Asia and Southern Asia.

Girls' access to education can be particularly limited if they live in poverty, in rural areas or in urban slums; belong to a minority group; are affected by armed conflict; or live with disabilities. Early marriage, early pregnancy and child labour can force some girls to drop out of school.

Successful interventions can include: the elimination of school fees, school feeding programmes and the distribution of free school uniforms. Investments in infrastructure such as improved water and sanitation, transportation and energy can improve the safety of girls at and on the way to school, and reduce girls' work burden at home.

Access is not enough. Education must be of good quality and relevant to the demands of the labour market. Currently, too many children leave school without basic literacy and numeracy skills.

It is crucial to invest in quality education, by prioritizing the professional development of teachers, revising curricula and improving learning conditions.

Gender stereotypes in formal curricula and textbooks and in counselling girl and boy students on their future educational trajectories

can limit students' career choices. Restraining women's and girls' educational choices have far-reaching consequences: it can contribute to the gender pay gap and to women's over-representation in lower-paying sectors and jobs.

Interventions can include: revising educational materials, sensitizing teachers, and exposing both girls and boys to male and female role models in non-traditional fields of study. Initiatives must focus on breaking gender stereotypes for both girls and boys.

Non-formal training can reach out-of-school women and girls, and is particularly important for students in countries affected by emergencies caused by conflicts or disasters.

Interventions can include providing access to information and communication technologies to expand the possibilities for distance education for women and girls.

Education is not enough for women to gain access to full employment and decent work. Women may be entering the labour market, but in jobs that do not guarantee their right to decent work, such as full social protection and opportunities for social dialogue. Young women may find the transition from education to employment more difficult than young men because of limited access to social networks, information channels and job search mechanisms.

Targeted initiatives can include: gender-sensitive counselling and placement

services, and gender-sensitive training courses. Job readiness and job search skills should be included in curricula for secondary and higher education and vocational training.

Entrepreneurship is another employment option for women.

Technical education and management and marketing skills training for women are instrumental in enhancing their entrepreneurship potential, including through increasing their capability to use and find markets for new technologies.

GOOD PRACTICES IN COMBATING STEREOTYPES AND IMPROVING THE QUALITY OF EDUCATION

- Sensitizing parents and communities to the value of girls' education (Turkey)
- Revision of curricula and textbooks to eliminate gender-related stereotypes (Greece)
- Setting evaluation criteria for the selection of gender-sensitive textbooks (Brazil)
- Providing gender-related guidelines to textbook producers (Malaysia)
- Training teachers on gender equality (Belgium)
- Conditional cash transfer programmes targeted at female students to increase girls' enrolment (India)

Empowering women and girls to contribute to science and technology

Progress has been made in advancing women's participation in science and technology education. At the tertiary level, women now dominate in some fields of science, particularly life sciences and humanities. However, women generally continue to be underrepresented in computer sciences

and sciences such as physics and agriculture research. In addition, women have not made the same inroads in engineering as they have made in sciences. Women must be able to contribute equally to the development of science and technology, and innovation, which enhance economic

growth, job creation, and general society well-being, and which will ensure that the needs of both women and men are met in new products and applications.

The 'gender-science stereotype', which associates men with mathematics and science, negatively impacts on girls' interest in these disciplines, and



their self-assessment and performance as students.

Targeted actions to overcome stereotypes can include: revising curricula and textbooks, sensitizing teachers, and exposing children to female role-models. Emphasizing the positive impacts of a scientific field on society — rather than its technical aspects only — can help make science and technology more attractive for girls and women.

GENDER-SENSITIVE PRACTICE IN SCIENCE AND TECHNOLOGY

In Bangladesh, women trained as engineers and working in the off-grid solar industry trained less educated women on how to build and repair component parts of solar PV systems, cascading economic returns to less educated sectors of society and making Bangladesh's economy more reliant on renewable energies.

Women remain underrepresented in the field of research and develop-

ment, be it in academia, the public sector or private companies. Women's participation in science and technology employment has been likened to a 'leaky pipeline', with a continuous attrition of women throughout their professional lives. Contributing factors for this attrition include: isolation in a male-dominated environment, difficulties in reconciling work and family life, and stereotypical views of women as less competent in these fields.

Policies and programmes can be put in place to increase the recruitment, retention, promotion and recognition of women in science and technology employment. Other measures can include: sensitization workshops for recruiters, provision of affordable childcare, mentoring programmes, and affirmative action for access in decision-making positions in research and development institutions.

Women constitute a significant

share of business owners, especially in developing countries, and can thus contribute to science, technology and innovation, and to job creation.

Science, technology and innovation policies can take into account and address the specific constraints that women entrepreneurs face, such as limited access to productive assets, information, ICTs and credit.

The role that communities themselves can play in solving local problems is being increasingly recognized. Rural and indigenous women have developed a vast repertory of knowledge and skills in sustainable agriculture, for instance.

Actors at the local level, in particular governments and non-governmental organizations play a critical role to recognize and support women's potential as innovators. Doing so can help foster, and diffuse, a greater number of innovations.

Women's Representation in Agricultural Research in Developing Countries

Within the developing world, women's participation in agricultural research averages 19.5 percent. Disparities exist across and within regions, however. Latin America and the Caribbean have higher percentages of female participation in agricultural research: for instance, Argentina and Uruguay have respectively 41.7 percent and 42.5 percent. Variations within Africa are quite significant. North Africa displays low levels of women's representation in the sector. Some countries such as Eritrea have figures as low as 3 percent. On the other hand, South Africa and Botswana enjoy higher rates at 34.5 percent and 42.2 percent, respectively. East and Southeast Asia have the highest rates of female participation in the developing world, with 54.2 percent female participation in Myanmar. In contrast, there are only 3 percent women agricultural researchers in Pakistan.

SOURCE: ADAPTED FROM THE AGRICULTURAL SCIENCE AND TECHNOLOGY INDICATORS (ASTI). AVAILABLE AT: <http://www.asti.cgiar.org/>

Making science and technology work for both women and men

Policymakers must also focus their efforts on the content of science and its applications. Scientists and engineers, whether male or female, are not free of gender biases and may overlook the need to factor in gender considerations into their research and product design. Integrating gender-based analysis in research and development — that is, examining the potential of each project

to reduce existing disparities between women and men — can help produce better science and more useful knowledge and products. It is also important that technology deployment efforts are informed by local realities to ensure the large-scale adoption of technology by women.

Governments have a responsibility to ensure that national and interna-

tional research agenda and innovation priorities benefit women and men equally. The international community can help stimulate innovation for underserved populations, for instance by organizing competitions for grant-making programmes that focus attention on women's needs, or by creating partnerships to help stakeholders pool funds and learn from each other's experiences.



GOOD PRACTICES IN MAKING SCIENCE AND TECHNOLOGY WORK FOR WOMEN

- Funding university chair positions for women in science and engineering academic departments (Canada)
- Pairing science undergraduates with high-school students (Norway)
- Universities actively reaching out to enroll more girls and women
- students (United Republic of Tanzania)
- Establishing a National Pact for Women in Mathematics, Informatics, Natural Science and Technology Careers (Germany)
- Organizing science camps (Zambia)
- Increasing the number of women teachers in technical vocational institutes (Pakistan)
- Establishing a biotechnology science park that brings together women entrepreneurs, scientists, financial institutions and industry (India)

Global Data

- The ratio of girls' to boys' enrolment has steadily improved, reaching 97 girls per 100 boys at primary level, 96 girls per 100 boys at secondary level and 108 women per 100 men at tertiary level in 2008.
- In 2007, 72 million children of primary-school age were out of school, 54 percent of whom were girls. Similarly, 54 percent of the 71 million adolescents who were out of school in 2007 were girls.
- Women make up nearly two thirds of the world's 759 million illiterate adults.
- At the tertiary level, women now dominate in some sub-fields of science, particularly life sciences and social sciences. Less progress has been made in engineering. In 2007, the global median share of female university students was 21 percent in engineering, manufacturing and construction.
- Female labour force participation was estimated to be 52.6 percent in 2008, compared with a male participation rate of 77.5 percent. Among the 20- to 24-year-old population, women continue to lag behind men in labour force participation in all regions.
- On average, across 121 countries with available data, women account for 29 percent of researchers, and only 15 percent of countries have achieved gender parity.

SOURCES: UNESCO GLOBAL GENDER AND EDUCATION DIGEST, 2010, WORLD BANK.

TWO REPORTS OF THE UNITED NATIONS SECRETARY-GENERAL explore the priority theme. The reports are available for download in the six official UN languages at: www.un.org/womenwatch/daw/csw/csw55/documentation.htm.

The United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) will service CSW for the first time

The 55th session of the Commission on the Status of Women will also welcome the establishment of the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), which merges four previously distinct parts of the United Nations system that focused exclusively on gender equality and women's empowerment. UN Women became

fully operational on 1 January 2011. Under the leadership of the Under-Secretary-General and Executive Director, Dr. Michelle Bachelet, UN Women will support inter-governmental bodies, such as the Commission on the Status of Women in their formulation of policies, global standards and norms. It will also help Member States to implement these standards,

standing ready to provide suitable technical and financial support to those countries that request it, and to forge effective partnerships with civil society. Another main role will be to promote accountability within the United Nations system for its own commitments on gender equality, including regular monitoring of system-wide progress.