

## **Financing for Gender Equality: Women in Science, Engineering and Technology**

**Parallel event held at the CSW 52**

**Organized by  
The National Commission of Women in India,  
the American Chemical Society,  
the Women's Humanitarian Network,  
UN Studies Program, Columbia University and  
Indian Young Professionals Network.**

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I would like to congratulate the organizers for taking the initiative to hold this event during the United Nations Commission on the Status of Women (CSW), focused on the very important topic of Financing for gender equality and empowerment of women in relation to science, engineering and technology.

The CSW took up the issue of gender equality and science and technology in the Beijing Platform for Action (1995) and the 23<sup>rd</sup> Special Session of the General Assembly in 2000, and in its consideration of the issue of education since 1995.

The UNDP *Human Development Report 2001: Making New Technologies Work for Human Development*, pointed out that technology is transforming development, expanding people's horizons and creating the potential to realize in a decade development that took generations to achieve in the past.

It is clear that there could be tremendous potential in scientific advances and technological change for gender equality and empowerment of women. However, this potential can only be realized if efforts are made to clearly identify and address relevant gender perspectives in this area. Without these efforts, the existing inequalities between women and men will negate the potential of science and technology and women will miss out on critical opportunities.

The potential for science and technology to transform the lives of women must be harnessed. Women all around the world have the right to expect that the spread of science and new technologies - as part of the globalizing process of integrating markets and linking people across boundaries - will lead to healthier lives, enhanced well-being, increased knowledge and capacities, enhanced productivity and sustainable livelihoods and greater rights and freedoms.

Ensuring that science and technology benefits women and girls requires attention to policies and strategies as well as to the institutions which regulate and support development of science and technology to accelerate the benefits and manage the inevitable risks. Critical decisions on resource allocation and investments, including in relation to education and training and access to tools and opportunities, must also systematically include a gender perspective.

Even for poor women in rural areas, science and technology can provide significant benefits, including increased production in their work in agriculture and off-farm employment, new job

opportunities, and sustainable sources of energy and water to reduce their work burdens, improve the health and well-being of their families and communities, and ensure sustainable livelihoods.

Already in 1995, Member States committed, through the Beijing Platform for Action, to ensuring that women and girls have equal access to science and technology. The Platform noted that science curricula are gender-biased and that girls are often deprived of basic education in mathematics, science and technical training. It emphasized that access to advanced study in science and technology was needed to prepare women to take an active role in the technological and industrial development of their countries.

The Platform called for provision of information to women and girls on the availability and benefits of vocational training and programmes in science and technology, and for diversification of vocational and technical training to improve access to and retention of women and girls. It noted the importance of adaptation of curricula and teaching materials to develop a supportive environment and for positive measures to ensure the full range of occupational choices in non-traditional careers for women and girls, including in areas of science and technology where they were under-represented.

Despite these very positive commitments more than 10 years ago, which were reiterated in 2000, women and girls continue to be excluded from equal participation in science and technology in many parts of the world as a result of their unequal status in society – legally, socially, politically and economically. Poverty, lack of education and training and unequal employment opportunities remain significant constraints. The exclusion of women and girls occurs in the public sector, in private sector companies, and in research institutions.

A recent UNESCO report (2007) indicates that women and girls still lag behind in relation to opportunities for education and training in science and technology. Even though there has been considerable progress in recent decades, gender disparities in science and technology are significant in secondary and tertiary level education,

Similarly, the report revealed that even though women have made inroads in employment in different areas of science and technology, there are serious remaining disparities in relation to pay, promotion, and access to certain areas of specialization.

Not surprisingly, the report also highlighted that women are also under-represented in scientific and technological research, particularly at top levels and are not equally represented in decision-making in important bodies on science and technology.

Greater attention to increasing access and involvement of women and girls to science and technology is required in institutions of higher education - including faculties of science and engineering, research and development centres, scientific and professional associations and societies, and bodies and networks focused on the promotion and coordination of science and technology at national, regional and international levels.

The statistics available on women's representation in all areas of science and technology leave much to be desired.

Let me give one example from the area of ICT, where the Division for the Advancement of Women has recently done some work. Most poor women in developing countries are further removed from the information age than the men whose poverty they share. Women's capacity to exploit the potential of the new ICT as tools for empowerment is constrained in different ways. Some constraints are linked to factors that affect both women and men, including access to technical infrastructure, connection costs, and computer literacy.

Other factors constraining access and use, such as poverty, illiteracy and language skills are particularly acute for women because of existing inequalities. Women are, for example, less likely to own communication assets, such as radios, mobile phones and computers. In addition, gender roles and relationships – which lead to limited mobility for women and girls, unequal access to resources, unequal sharing of domestic responsibilities with resulting limited free time, and inability to access communal resources because of security risks - play a key role in determining the capacity of women to participate on equal terms with men in the information society.

As a result, women are the minority of users of ICT in almost all developed and developing countries. The trend towards inequality in access and use starts early. In the United States it has been estimated that boys are five times more likely than girls to use home computers, and parents spend twice as much on ICT products for their sons as they do for their daughters.

The International Labour Organization (ILO) (2001) noted that patterns of gender segregation are being reproduced in the information economy with women concentrated in end-user, lower-skilled ICT jobs related to word processing and data entry and men in more senior managerial and administration positions and in the design of networks, operating systems and software.

In most countries, women are under-represented in ICT decision-making structures including policy and regulatory institutions and ministries responsible for ICT, and on the boards and senior management of IT companies and professional organizations working in this area.

With the rapid development of science and technology, the human resources at national level are critical to ensuring that countries can remain competitive and at the cutting edge of development. Women and girls are a significant and under-utilized pool of talent and a resource base in relation to science and technology. There must be a significantly increased investment in women and girls in this area, as a matter of human rights, but also for greater efficiency and effectiveness.

The clear lack of coherence between the global policy commitments on gender equality in science and technology and implementation at national level must be addressed as a matter of urgency. Access to resources is one of the factors behind this critical gap in implementation. It is therefore important to take the opportunity provided by the priority theme of the Commission on financing gender equality to look more closely at the resource question in relation to gender equality in science and technology.

Some of the critical learnings coming out of the preparations for the Commission include the need to clearly estimate the cost of persistent inequalities and to assess resource needs in achieving

greater equality, including through assessing the resource allocations needed for implementation of specific policies, strategies and action plans to promote gender equality.

In relation to promoting gender equality in science and technology, this would mean that the economic cost of leaving out women and girls in science and technology education and training, in employment opportunities, in research and development activities, and in critical decision-making processes, should be explicitly calculated in both the short and long term. It means further that the resources needed to implement policies, strategies and action plans aimed to promoting greater equality in science and technology must be specifically outlined and sources of funding clearly identified.

The innovative work on gender-responsive budgets can be explicitly applied in the context of science and technology. This would imply that all budgets for science and technology, including, for example, for research and development activities and for engineering courses and institutions, should explicitly and systematically incorporate gender perspectives so that the linkages between commitments to gender equality in these areas and resource allocations are clearly established.

Resources should also be made available for specific activities targeted to women and girls to address the gaps identified in relation to access to and benefits from science and technology. The Platform for Action made one very clear recommendation on the resource needs for targeted action on promoting gender equality in science and technology: "Provide funding for special programmes, such as programmes in mathematics, science and computer technology, to advance opportunities for all girls and women." (85b)

It is a hopeful sign that in the ten-year review of implementation of the Platform for Action in 2005, a number of countries reported on innovative programmes to increase the access to and retention of girls in science and technology programmes, starting at very young ages.

I hope that your discussion today will provide further innovative ideas on ways to move forward in ensuring adequate resources for gender equality in science and technology, in order to release the potential of women and girls for the good of families, communities and societies.

Thank you.