### Agreed conclusions on access and participation of women and girls in education, training and science and technology, including for the promotion of women's equal access to full employment and decent work

1. The following agreed conclusions adopted by the Commission are transmitted to the Economic and Social Council, in accordance with its resolution 2008/29 of 24 July 2008, as an input into the annual ministerial review of 2011.

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

1. The Commission on the Status of Women reaffirms the Beijing Declaration and Platform for Action, the outcome documents of the twenty-third special session of the General Assembly and the declarations adopted by the Commission on the occasion of the tenth and fifteenth anniversaries of the Fourth World Conference on Women.

2. The Commission reiterates that the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of the Child, the Convention on the Rights of Persons with Disabilities and the Optional Protocols thereto, as well as other conventions and treaties, such as the relevant conventions of the United Nations Educational, Scientific and Cultural Organization and the International Labour Organization, provide a legal framework and a comprehensive set of measures for the promotion of gender equality in education and employment.

3. The Commission recalls the United Nations Millennium Declaration and General Assembly resolution 65/1 of 22 September 2010, and recognizes the interdependence of all the Millennium Development Goals. The Commission also recalls the ministerial declaration of the 2010 high-level segment of the Economic and Social Council on implementing the internationally agreed goals and commitments in regard to gender equality and empowerment of women. It takes note of the Budapest Science Agenda — Framework for Action, adopted at the World Conference on Science in 1999, and of the Dakar Framework for Action: Education for All, adopted at the World Education Forum in 2000.

4. The Commission welcomes the establishment of the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) and its operationalization, which will strengthen the ability of the United Nations to support the achievement of gender equality and the empowerment of women, and welcomes the appointment of Michelle Bachelet as the first Under-Secretary-General and Executive Director of UN-

<sup>\*</sup> For the discussion, see chap. II, paras. 75-78.

Women.

5. The Commission acknowledges the important role of national machineries for the advancement of women, which should be placed at the highest possible level of government, the relevant contribution of national human rights institutions where they exist, and the important role of civil society, especially women's organizations, in advancing the implementation of the Beijing Declaration and Platform for Action and in promoting the full and equal access and participation of women and girls in education, training and science and technology.

6. The Commission stresses that education is a human right, and that equal access to education, training and science and technology empowers women and girls in the context of global economic and technological changes and promotes development, all human rights, human rights education and learning at all levels, as well as gender equality, the elimination of all forms of discrimination and violence against women and girls and the eradication of poverty.

7. The Commission reaffirms that the best interest of the child shall be the guiding principle of those responsible for his or her education and guidance in the exercise by the child of his or her rights and that responsibility lies in the first place with his or her parents or legal guardians.

8. The Commission welcomes the progress made in increasing women's and girls' access to and participation in education and training, including science and technology education. The Commission recognizes the potential of education and training and science and technology, to contribute to the economic empowerment of women, which also leads to accelerating progress towards achieving the internationally agreed development goals, including the Millennium Development Goals, by 2015.

9. The Commission notes that quality education and full and equal access and participation in science and technology for women of all ages are imperative for achieving gender equality and the empowerment of women, and an economic necessity, and that they provide women with the knowledge, capacity, aptitudes, skills, ethical values and understanding necessary for lifelong learning, employment, better physical and mental health, including the prevention and control of maternal mortality, HIV and AIDS and other communicable and noncommunicable diseases, as well as for full participation in social, economic and political development.

10. The Commission welcomes the important contribution that women make to all fields of education, training, science and technology, and recognizes their work in the full spectrum of professions in science and technology. The Commission also acknowledges that women and men should continue to contribute to the promotion of the ethical dimensions of scientific and technological progress. 11. The Commission recognizes that research and development in science and technology, and its dissemination, have insufficiently responded to women's needs. The Commission stresses the need for increased cooperation among countries, including through international cooperation and transfer of technologies on mutually agreed terms, especially to developing countries, in order to enhance equal access of women to science and technology and their participation in science and technology education.

12. The Commission expresses continued concern at the negative impact of the global crises, such as the financial and economic crisis, the food crisis and continuing food insecurity, and the energy crisis, as well as the challenges posed by poverty, natural disasters and climate change, on the empowerment of women and girls, including their access and participation in education, training, science and technology.

13. The Commission expresses concern at the serious and persistent obstacles that still hinder the advancement of women and further affect their participation in decision-making, including the persistent feminization of poverty, the lack of equal access to health, education, training and employment, as well as armed conflict, lack of security and natural disasters.

14. The Commission acknowledges that men and women continue to face gender stereotypes, as well as challenges and obstacles to changing discriminatory attitudes, and stresses that challenges and obstacles remain in the implementation of international standards and norms to address the inequality between men and women.

15. The Commission expresses deep concern about all legal, economic, social and cultural barriers that prevent women and girls from having equal access to education and training, and recognizes that some women and girls face multiple discrimination and disadvantages that prevent their participation in education, training and employment.

16. The Commission recognizes that the upbringing of children requires the shared responsibility of parents, women and men and society as a whole, and that maternity, motherhood, parenting and the role of women in procreation must not be a basis for discrimination nor restrict the full participation of women in society.

17. The Commission expresses deep concern that discrimination and violence against women and girls, including sexual harassment and bullying, continue to occur in all parts of the world, including in education and in the workplace. The Commission notes that those are obstacles to the achievement of women's and girls' equal access to and participation in education, including in science and technology education, and training, as well as impediments to the development of their full potential as equal partners with men in other aspects of life, including full employment and decent work.

18. The Commission also expresses concern that inadequate educational opportunities and low quality education reduce the benefits of education and training for women and girls, men and boys, and that women's educational gains are yet to translate into equal access to full employment and decent work, with consequent long-term adverse effects on the development of any society. It remains deeply concerned by the persistence of high female illiteracy rates and gender stereotyped roles of women and men, which inhibit women's equal participation in employment, leading to occupational segregation, including the widespread underrepresentation of women and girls in many fields of science and technology, which represents a loss of talent and perspectives, hinders economic development and women's economic empowerment and can contribute to the gender pay gap.

19. The Commission expresses concern about high drop-out rates from school of female students in many parts of the world, especially at the secondary level, and including at the tertiary level, owing to multiple discrimination and factors that impede girls' participation in education.

20. The Commission expresses concern that the unequal sharing of responsibilities of daily life, including caregiving between women and men, girls and boys, has a disproportionate impact on women's and girls' access to education, training and science and technology, and on their economic empowerment and long-term economic security.

21. The Commission underlines that addressing the barriers to equal access of women and girls to education, training and science and technology requires a systematic, comprehensive, integrated, sustainable, multidisciplinary and multisectoral approach, including policy, legislative and programmatic interventions and, as appropriate, gender-responsive budgeting, at all levels.

22. The Commission urges Governments, at all levels, including local authorities and national machineries for the advancement of women, and/or, as appropriate, the relevant entities of the United Nations system and international and regional organizations, within their respective mandates and bearing in mind national priorities, and invites national human rights institutions where they exist, and civil society, including non-governmental organizations, academia, educational, scientific research and funding institutions, the private sector, employer organizations, trade unions, professional associations, the media and other relevant actors, to take the following actions, as appropriate:

#### Strengthening national legislation, policies and programmes

(a) Mainstream a gender perspective in legislation, policies and programmes within all governmental sectors, including education, training, science and technology, academia, research institutions and research funding agencies, in order to address unequal access and participation of women and girls in education, training and science and technology, including for the promotion of women's equal access to full employment and decent work;

(b) Strengthen capacities to ensure that science education policies and curricula are relevant to the needs of women and girls so that developments in science and technology can directly benefit them;

(c) Improve and systematize the collection, analysis and dissemination of sex-, age- and disability-disaggregated data; enhance capacity development in this regard; and develop relevant gender-sensitive indicators to support legislative development and policymaking on education, training and science and technology;

(d) Encourage the provision of institutional and financial support for academic studies that can produce gender-specific knowledge and feed into all policies and programmes on education, training and research and support research, including longitudinal policy research, to identify specific gaps in education and career pathways, so as to promote the retention of women and girls in different fields of science and technology and in other relevant disciplines;

(e) Strengthen the monitoring and evaluation and, where appropriate, the review of existing policies and programmes to promote gender equality and the empowerment of women in education, training, science and technology, and access to full employment and decent work, in order to assess their effectiveness and impact, ensure a gender perspective in all policies and programmes and strengthen accountability;

(f) Encourage and, as appropriate, increase public and private investment in education and training to expand women's and girls' access to quality education and training throughout their life cycle, including, inter alia, through the provision of scholarships for study in science and technology in secondary and tertiary institutions, and to ensure that research and development in the field of science and technology directly benefits women and girls;

(g) Incorporate systematically a gender perspective into budgetary policies at all levels to ensure that public resources in education, training, science, technology and research equally benefit women and men, girls and boys, and contribute to the empowerment of women and girls in particular;

(h) Urge developed countries that have not yet done so, in accordance with their commitments, to make concrete efforts towards meeting the target of 0.7 per cent of their gross national product for official development assistance to developing countries and the target of 0.15 to 0.20 per cent of their gross national product for official development assistance to least developed countries, and encourage developing countries to build on the progress achieved in ensuring that official development assistance is used effectively to help meet development goals and targets and help them, inter alia, to achieve gender equality and the empowerment of women;

(i) Strengthen international cooperation in the area of 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 and the promotion of women's participation in the exchange of scientific knowledge, and welcome and encourage in this regard South-South, North-South and triangular cooperation and recognize that the commitment to explore opportunities for further South-South cooperation entails not seeking a substitute for but rather a complement to North-South cooperation;

(j) Prioritize and encourage enhanced funding and capacity development efforts for the education and training needs of girls and women in development assistance programmes;

(k) Continue to strengthen policies relevant for women's economic empowerment aimed at addressing inequality affecting women and girls, in access to and achievement in education at all levels, including in science and technology, in particular to eliminate inequalities related to age, poverty, geographical location, language, ethnicity, disability, and race, or because they are indigenous people, or people living with HIV and AIDS;

(1) Strengthen national efforts, including with the support of international cooperation, aimed at addressing the rights and needs of women and girls affected by natural disasters, armed conflicts, other complex humanitarian emergencies, trafficking in persons and terrorism, within the context of access and participation of women and girls to education, training and science and technology, including for the promotion of women's equal access to full employment and decent work. Also underline the need to take concerted actions in conformity with international law to remove the obstacles to the full realization of the rights of women and girls living under foreign occupation, so as to ensure the achievement of the above-mentioned goals;

#### Expanding access and participation in education

(m) Ensure women's and girls' full and equal access to quality formal, informal and non-formal education and vocational training at all levels, including to free and compulsory primary education, and provide educational opportunities, including in science and technology, from early childhood and throughout the life cycle, including lifelong learning and retraining, human rights education and learning, and adult and distance education and e-learning, including in information and communications technology and entrepreneurial skills, in order to promote the empowerment of women, inter alia, through enhancing and facilitating women's access to full and productive employment, in particular to careers in science and technology; (n) Improve and expand women's and girl's access to distance education, e-learning, tele-education and community radio, including in rural and remote communities, owing to the important role they play in women's development, including, inter alia, in helping to overcome issues related to time constraints, lack of accessibility, lack of financial resources and family responsibilities;

(o) Increase enrolment and retention rates of girls in education, inter alia, by: allocating appropriate and adequate budgetary resources; enlisting the support of parents and the community, including through campaigns and flexible school schedules; providing financial and other incentives targeted at families, including access to free education at the primary level, and at other levels where possible, and scholarships; and providing teaching, learning and hygiene and health supplies, as well as nutritional and academic support, in order to minimize the costs of education, in particular to families, and to facilitate parents' ability to choose education for their children;

(p) Ensure that pregnant adolescents and young mothers, as well as single mothers, can continue and complete their education, and in this regard, design, implement and, where applicable, revise educational policies to allow them to return to school, providing them with access to health and social services and support, including childcare facilities and crèches, and to education programmes with accessible locations, flexible schedules and distance education, including e-learning, and bearing in mind the challenges faced by young fathers in this regard;

(q) Condemn all forms of violence against women and girls and take appropriate action to strengthen and implement legal, policy, administrative and other measures to prevent and eliminate all forms of discrimination and violence in order, inter alia, to ensure access and participation in education, training, full employment and decent work;

(r) Improve the safety of girls at and on the way to school, including, inter alia, by improving infrastructure such as transportation, providing separate and adequate sanitation facilities, improved lighting, playgrounds and safe environments, conducting violence prevention activities in schools and communities and establishing and enforcing penalties for all forms of harassment and violence against girls;

## Strengthening gender-sensitive quality education and training, including in the field of science and technology

(s) Improve the quality of education at all levels for both girls and boys, including in science and technology education, through improving learning conditions, continuous teacher training, teaching methodologies and curriculum development, implementing programmes to improve achievements for the most disadvantaged learners and expanding recruitment and support for teachers, in particular for women teachers in scientific and technological disciplines;

(t) Ensure that education results in the acquisition by women and girls of literacy and numeracy skills, knowledge and other skills that enhance and broaden their employment opportunities;

(u) Expand and improve teacher education and training and systematically integrate a gender perspective in such programmes in order to eliminate all forms of discrimination and violence against women and girls and to overcome gender stereotypes;

(v) Develop gender-sensitive curricula for educational programmes at all levels and take concrete measures to ensure that educational materials portray women and men, youth, girls and boys in positive and non-stereotypical roles, particularly in the teaching of scientific and technological subjects, in order to address the root causes of segregation in working life;

(w) Remove legal, regulatory and social barriers, where appropriate, to sexual and reproductive health education within formal education programmes on women's health issues;

(x) Ensure women's and girls' right to education at all levels as well as access to life skills and sex education based on full and accurate information and, with respect to girls and boys, in a manner consistent with their evolving capacities, and with appropriate direction and guidance from parents and legal guardians, in order to help women and girls, men and boys, to develop knowledge to enable them to make informed and responsible decisions to reduce early childbearing and maternal mortality, to promote access to pre- and post-natal care and to combat sexual harassment and gender-based violence;

(y) Take steps to promote access for women and girls to education and training, including human rights education and learning at all levels, which can foster tolerance and mutual understanding and respect for all human rights, so that they can realize their full human potential by learning about the comprehensive framework of all human rights and fundamental freedoms;

(z) Provide quality education in emergency situations that is gender-sensitive, centred on learners, rights-based, protective, adaptable, inclusive, participatory and reflective of the specific living conditions of women, children and youth, and that pays due regard, as appropriate, to their linguistic and cultural identity, mindful that quality education can foster tolerance and mutual understanding and respect for the human rights of others;

(aa) Improve hands-on experimentation and collaborative work in science and technology classes, highlight the broad societal applications of science and technology in curricula and educational material and expose girls and boys, women and men, to female role models in science and technology, in order to make science and technology, including engineering and mathematics, more attractive for girls and women;

(bb) Promote a positive image of careers in science and technology for women and girls, including in the mass media and social media and through sensitizing parents, students, teachers, career counsellors and curriculum developers, and devising and scaling up other strategies to encourage and support their participation in these fields;

# Supporting the transition from education to full employment and decent work

(cc) Address the different barriers women and girls face in the transition from school to work by: expanding the scope of education and training opportunities that are relevant to employment opportunities and aligned with rapidly changing labour market needs, particularly in emerging, new and non-traditional fields; helping women acquire business, trade, information and communications technology and entrepreneurship skills; raising awareness of such opportunities and of their suitability to both women and men, particularly among parents, teachers, career counsellors and other advisers; and encouraging interaction between educational systems, the private sector and civil society, as appropriate;

(dd) Adopt policies and mechanisms to recognize women's prior learning and management skills, including those gained from informal and/or unpaid work, especially for women who discontinued their education or employment for various reasons, so as to facilitate their access to education, training and employment opportunities;

(ee) Improve access to gender-sensitive career counselling and to job search support services and include job readiness and job search skills in curricula for secondary and higher education and vocational training, in order to facilitate the transition from school to work and re-entry into the labour market for women of all ages;

(ff) Work to eliminate occupational and sectoral segregation and the gender pay gap by recognizing the value of sectors that have large numbers of women workers, such as care and other service areas, improving career pathways and working conditions and undertaking, evaluating and, where necessary, reviewing legislation, policies and programmes, public awareness campaigns and other measures, such as career management, to promote women's entry into non-traditional sectors;

(gg) Promote the reconciliation of work and family responsibilities for women and men, as well as the equal sharing of employment and family responsibilities between women and men, including by: designing, implementing and promoting family-friendly legislation, policies and services, such as affordable, accessible and quality care services for children and other dependent persons, and parental and other leave schemes; undertaking campaigns to sensitize public opinion and other relevant actors to these issues; and promoting measures that reconcile care and professional life and emphasize men's equal responsibilities with respect to household work;

(hh) Develop or strengthen policies and programmes to support the multiple roles of women in society, including in the fields of science and technology, in order to increase women's and girls' access to education, training, science and technology, while acknowledging the social significance of maternity and motherhood, parenting and the role of parents and other guardians in the upbringing of the children and caring for other family members, and ensure that such policies and programmes also promote shared responsibility of parents, women and men and society as a whole;

(ii) Encourage employers and research funding agencies to establish flexible and non-discriminatory work policies and arrangements for both women and men, such as time extension on research grants for pregnant researchers, leave schemes, quality care services and social protection policies, in order to improve the retention and progression of women in science and technology;

(jj) Implement gender-sensitive policies and programmes for women migrant workers and provide safe and legal channels that recognize their skills and education and fair labour conditions, facilitate their productive employment and decent work and integration into the labour force, including, inter alia, in the fields of education and science and technology, and ensure that all women, including care workers, are legally protected against violence and exploitation;

# Increasing retention and progression of women in science and technology employment

(kk) Encourage workplace environments and institutional practices that value all members and offer them equal opportunities to reach their full potential, ensuring that gender equality and gender mainstreaming are considered a necessary dimension of human resources management, in particular for the modernization of scientific and technological organizations and institutions, both in the public and private sectors;

(11) Encourage the use of clear and transparent criteria for, and promote the achievement of gender balance in, recruitment, promotion and recognition in science and technology, both in the public and private sectors; train and sensitize leadership and staff, at all levels, in gender mainstreaming and gender equality issues and prevent direct and indirect discrimination against women; and support the building of leadership skills for women;

(mm) Develop career advisory, networking and mentoring programmes, including programmes that utilize information and communications technology; support role models and facilitate programmes that link women scientists around the world; and promote measures to improve female retention and progression in the fields of science and technology, with a special focus on women scientists in tertiary education and early-stage career and women re-entering science and technology careers;

(nn) Take steps to ensure that science, technology and innovation policies take into account and address the specific constraints faced by women entrepreneurs and facilitate their access to credit, training, information and business support services, including those provided in technology parks and business incubator centres;

(oo) Set concrete goals, targets and benchmarks, as appropriate, while supporting a merit-based approach, to achieve equal participation of women and men in decision-making at all levels, especially in science and technology institutions, such as science academies, research funding institutions, academia and the public and private sectors, as well as in the design of science and technology policies and research and development agendasetting;

#### Making science and technology responsive to women's needs

(pp) Utilize the full potential of science and technology, including in engineering and mathematics, and their innovations to deliver improvements in infrastructure and sectors such as energy, transportation, agriculture, nutrition, health, water and sanitation and information and communications technology, in order, inter alia, to eradicate poverty, promote social development and achieve women's economic empowerment;

(qq) Create awareness of the needs of women in science and technology, including by encouraging the media to sponsor popular science programming, and report on the differential impact of science and technology on women and men;

(rr) Encourage the integration of a gender perspective in the science and technology curricula throughout all stages of education and continuous learning, and the use of gender-based analysis and gender impact assessments in research and development in science and technology, and promote a userdriven approach to technology development in order to increase the relevance and usefulness of advancements in science and technology for both women and men;

(ss) Respect, preserve and maintain women's traditional knowledge and innovation while recognizing the potential of rural and indigenous women to contribute to the production of science and technology and of new knowledge to improve their lives and those of their families and communities;

(tt) Formulate and implement public policies that increase women's and girls' access to digital technologies, including through conducting local communications campaigns.

23. The Commission recognizes the need for the compilation and sharing of good practice examples and lessons learned in mainstreaming a gender perspective into science, technology and innovation policies and programmes, with a view to replicating and scaling up successes, and in this regard looks forward to any steps or actions that could be taken by the relevant United Nations bodies, especially the Commission on Science and Technology for Development.