

Resolution

2011/17

Science and technology for development

The Economic and Social Council,

Recognizing the role of the Commission on Science and Technology for Development as the United Nations torch-bearer for science, technology and innovation for development,

Recognizing also the critical role of innovation in maintaining national competitiveness in the global economy and in realizing sustainable development,

Recalling the 2005 World Summit Outcome, which recognizes that the role of science and technology, including information and communications technologies, are vital for the achievement of the internationally agreed development goals, and reaffirming the commitments contained therein, especially the commitment to support the efforts of developing countries, individually and collectively, to harness new agricultural technologies in order to increase agricultural productivity through environmentally sustainable means,¹

Recalling also that the United Nations Conference on Trade and Development is the secretariat of the Commission,

Recalling further the work of the Commission on science, technology and engineering for innovation and capacity-building in education and research and on development-oriented policies for a socio-economically inclusive information society, including policies relating to access, infrastructure, and an enabling environment,

Welcoming the work of the Commission on its two current priority themes, “Technologies to address challenges in areas such as agriculture and water” and “Measuring the impact of information and communications technology for development”,

Recognizing the important role that information and communications technologies play in promoting innovation in science and technology for development,

Recognizing also the importance of science, technology and innovation policy reviews in assisting developing countries to strengthen their national development plans and improve their innovation systems,

Recalling the agreed conclusions of the Commission on the Status of Women 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,² adopted at its fifty-fifth session, in which it *inter alia*, highlighted the need for the sharing of good practice examples in mainstreaming a gender perspective into science, technology and innovation policies and programmes, with a view to replicating and scaling up successes, and recalling further the

¹ See General Assembly resolution 60/1, para. 60.

² See *Official Records of the Economic and Social Council, 2011, Supplement No. 7 (E/2011/27)*, chap. I, sect. A.

call of the Commission on the Status of Women upon the Commission on Science and Technology for Development for concrete steps in this respect,

Taking note of the report of the intersessional panel meeting of the Commission on Science and Technology for Development, held in Geneva in December 2010 and of the report prepared by the secretariat of the United Nations Conference on Trade and Development,³

Taking note also of the reports of the Secretary-General of the United Nations to the Commission on Science and Technology for Development,⁴

Extending its appreciation to the Secretary-General of the United Nations Conference on Trade and Development for his role in helping to complete the aforementioned reports in a timely manner,

Noting that science, technology and innovation, and information and communications technologies are essential to raising agricultural productivity and to soil, water and watershed management, particularly to support smallholder farmers,

Noting with concern that there has been a decline of investment in publicly funded agricultural research and development in many countries, as well as a decrease in donor support for agricultural research,

Noting that agricultural research, education and extension services in many countries do not adequately address local, social needs, especially those related to the poor, including smallholder farmers,

Recognizing the key role played by women in agriculture and water management at the domestic and farm levels, while noting their lack of access to credit, land, knowledge and skills that are essential to raising productivity and reducing poverty,

Recognizing also that increased investments in watershed management, agricultural knowledge, water and soil management, and science and technology, particularly when complemented by investments in rural development in such areas as infrastructure, telecommunications and processing facilities, can increase productivity and yield high economic rates of return, reduce poverty and have positive environmental, social, health and cultural benefits,

Taking note of the outcome of the Fourth United Nations Conference on the Least Developed Countries, held in Istanbul, Turkey, from 9 to 13 May 2011, the Istanbul Programme of Action and the Political Declaration adopted by the member countries,

Extending its appreciation to the Government of Turkey for its initiative to set up an International Science, Technology and Innovation Centre with a view to helping to build the technological capabilities of the least developed countries,

Decides to make the following recommendations for consideration by national Governments, the Commission on Science and Technology for Development and the United Nations Conference on Trade and Development:

³ E/CN.16/2011/CRP.1.

⁴ E/CN.16/2011/2 and E/CN.16/2011/3.

(a) Governments are encouraged to take into account the findings of the Commission and take the following actions:

(i) Review their agricultural science, technology and innovation systems with a view to strengthening policies for more sustainable agricultural practices, particularly for smallholder farmers, while integrating a gender perspective in the design of these policies;

(ii) Consider increasing the share and improving the effectiveness of public expenditure for agricultural research and development;

(iii) Target public investment towards improving physical and research and development infrastructures (including rural road networks, power and Internet connections, education, training and health), linkages among farmers, agricultural research, agricultural product processing and marketing, and extension services, supporting sustainable, regenerative production methods;

(iv) Review research and education systems to ensure that they adequately address the challenges faced by smallholder farmers to achieve more sustainable agricultural practices;

(v) Encourage participatory research which engages farmers, agricultural workers, especially women, and other stakeholders;

(vi) Support sustainable agriculture by introducing mechanisms and policies that prevent land degradation and the overuse of pesticides, fertilizers, water and energy, especially fossil fuels, as well as consider the health, environmental and social costs of agricultural production processes;

(vii) Support research on irrigation and soil improvement technologies, as well as the application of affordable information and communication technologies and other technologies, to lower costs and make agriculture more profitable for smallholder farmers;

(viii) Consider improving market access for developing country producers;

(b) The Commission on Science and Technology for Development is encouraged to:

(i) Provide technical and policy support and advice, upon request, on how to strengthen and stimulate innovation in sustainable agricultural and water management systems, including extension services, in collaboration with the United Nations Conference on Trade and Development, the Food and Agriculture Organization of the United Nations and other relevant international and regional organizations;

(ii) Promote an integrated, international and collaborative approach in these areas, particularly to meet the needs of smallholder farmers;

(iii) Promote the exchange, dissemination and diffusion of best practice examples in the area of agricultural science, technology and innovation and promote cooperation between countries in order to face common challenges in matters of science and technology;

(iv) Facilitate new science, technology and innovation policy reviews, as requested by member countries, to emphasize science and technology and information and communications technologies in building human capacity and infrastructure to foster innovation in national development plans and programmes, in close collaboration with the United Nations Educational, Scientific and Cultural Organization, the World Bank and other relevant international development banks and institutions, and consider new modalities to monitor progress for their implementation;

(v) In particular, the Commission should identify opportunities and best practices and synergies in and between e-science, e-engineering and e-education programmes worldwide in the course of performing science, technology and innovation policy reviews;

(vi) Complete and disseminate the new science, technology and innovation policy methodology guidelines and share outcomes and best practices resulting from their implementation;

(vii) Examine new metrics to assess and document outcomes of investments in science and technology and engineering research and development, education and infrastructure, in collaboration with the United Nations Educational, Scientific and Cultural Organization, the World Bank and member countries that have established programmes in this field of research;

(viii) Continue to provide a forum, in collaboration with its Gender Advisory Board, to share good practice examples and lessons learned in integrating a gender perspective in science, technology and innovation policymaking and implementation;

(ix) Consider, on an annual basis, an award, in collaboration with the World Summit on the Information Society World Summit Awards and the International Center for New Media, in Salzburg, Austria, for the innovative application of information and communications technologies in the fields of science, technology and engineering that support development.

*44th plenary meeting
26 July 2011*