

Resolution

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 science, technology and innovation in building and maintaining national competitiveness in the global economy, addressing global challenges and in realizing sustainable development,

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

Recalling the 2005 World Summit Outcome, which recognizes that science and technology, including information and communication technologies, are vital for the achievement of the internationally agreed development goals, and reaffirming the commitments contained therein,

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-orientated 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, “Innovation, research, technology transfer for mutual advantage, entrepreneurship and collaborative development in the Information Society”, and “Open access, virtual science libraries, geospatial analysis and other complementary information and communications technology, engineering and mathematics assets to address development issues, with particular attention to education”,

Recognizing that collaborative learning is central to innovation, technology transfer, and entrepreneurship and involves absorptive and productive capacity-building at the individual and the organizational levels,

Recognizing the work of UN institutions including UNCTAD in analyzing the impact of transfer of technology on trade and development

Noting that open access and virtual science libraries are two complementary mechanisms to increase and extend knowledge flows and help developing countries to obtain data and research,

Noting that greater attention needs to be paid to the growing array of online scientific and technical resources relevant to scientific and technical communities worldwide,

Recognizing further that the effective introduction of ICTs in education requires not only access to technology but also to build capacities for science, technology and innovation, absorption and production through development of human resources, educational framework conditions, infrastructure and progressive national policies,

Noting that Geographic Information Systems (GIS) and geospatial analysis are used in many sectors of society and have important applications in addressing development challenges but remain under-utilized for transformational potential,

Recognizing the Resolution 66/211 on Science and Technology for Development encouraged United Nations Conference on Trade and Development to continue to undertake Science, Technology and Innovation Policy (STIP) reviews, with a view to assisting developing countries and countries with economies in transition in identifying the measures that are needed to integrate science, technology and innovation policies into their national development strategies,

Taking note with appreciation the high quality STIP Reviews prepared by UNCTAD for Peru and El Salvador and the emphasis shown on the need to monitor the implementation of STIP Reviews by countries as exemplified in the report by Angola,

Recalling ECOSOC Decision 2011/235 providing for the extension to 2015 of the Gender Advisory Board (GAB), as well as General Assembly Resolutions 66/129, 66/211 and 66/216. addressing, respectively, improvement of the situation of women in rural areas, barriers to equal access for women and girls to science and technology, and integration of a gender perspective into development policies and programmes;

Taking note of the report entitled "Applying a Gender Lens to Science, Technology and Innovation", prepared by UNCTAD in close collaboration with the Gender Advisory Board of the Commission,

Recognizing further that it is crucial to understand the means by which people of different gender, ages, socioeconomic situations, and organizations build the capabilities required to achieve greater capacities for entrepreneurship and collaborative development,

Decides to make the following recommendations for consideration by national Governments, the Commission on Science and Technology for Development and UNCTAD:

(a) Governments, individually and collectively, are encouraged to take into account the findings of the Commission and consider taking the following actions:

(i) Promote the development of ICT platforms, involving national research institutes and universities, with a view to participating in international research networks and benefiting from the opportunities for collaborative learning,

(ii) Ensure that multilateral governance mechanisms and standardization bodies of ICT and global networks are democratic, fair, and coherent, with effective participation of developing countries,

(iii) Promote national policies to encourage the use of ICTs, especially those that have been tailored to local needs in their countries and establish programmes for the improvement of human resources in this field

(iv) Foster partnerships with other stakeholders to overcome basic infrastructural constraints, such as electricity and other services, that limit access to and use of ICT resources, with particular attention to locally adapted solutions that can be scaled up regionally

(v) Collaborate to address the “content divide” by exploring ways of increasing online scientific publications and accessibility of content in local languages,

(vi) Encourage national research agencies and foundations to provide data and research results to the public domain, and make them freely available in an open and accessible format

(vii) Encourage international collaboration in disseminating digitized publications resulting from publicly-funded research, making it freely available online and easily accessible,

(viii) Encourage, in partnership with other stakeholders, the logistical and financial viability of virtual science libraries, particularly those that include a platform to facilitate networking among scientists across geographic boundaries and provide an integrated search capability across all available online publications;

(ix) Encourage the formation of national research and education networks (NRENs), which encourage networking among scientists, increase collective buying power for online science research services including access to journals, and result in sharing of scarce resources

(x) Strengthen secondary and postsecondary curricula to better integrate GIS and fundamental concepts of geography that enrich spatial thinking in national education programs and by supporting teachers through training to better integrate GIS, geography and spatial thinking into their professional development,

(xi) Establish bodies dedicated to obtaining, storing and disseminating geographic data, including remote-sensing data, to make GIS data available for public use at the lowest cost

(xii) Involve the private sector in the process of increasing technology openness for geo-spatial data. For example, public sector organizations such as government agencies and libraries, can collaborate with private sector firms to index geospatial information and make it easily searchable and available online,

(xiii) Promote the dissemination of successful experiences, including of constraint-based innovations, to foster an innovative culture through mechanisms such as the creation of awards and mass media campaigns,

(xiv) Encourage and support efforts of learning and capacity development at the firm and industry levels through the provision of an enabling environment.

(xv) Encourage scientific, research and academic institutions in their countries, especially in

developed countries, to collaborate with counterparts in all other countries, with particular attention to those in the least developed countries (LDCs)

(xvi) Recognize the need to continue providing adequate funding and resources for science and technology particularly in developing countries.

(xvii) Consider mechanisms with a view to apply a "gender lens" in scientific research, from agenda setting, to the design and implementation of projects, for example through the use of quotas and gender-sensitive assessment and evaluation.

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

(i) With respect to CSTD, continue, in role as a "torch-bearer" for innovation, to raise awareness amongst policymakers about the process of innovation and to identify particular opportunities for developing countries to benefit from such innovation. Special attention should be placed on new trends in innovation that can offer novel possibilities for developing countries-especially for SMEs and individual entrepreneurs.

(ii) Share and analyse evidence on the development of innovative capacities including at the firm level especially for small and medium enterprises (SMEs), to understand the social and economic dimensions of these processes and provide insights for the development of public policy,

(iii) Provide a forum for dialogue and for the sharing of best practices and experiences to identify and to recommend ways and appropriate measures to promote innovation, research and development, new knowledge creation, technology transfer, as well as ICTs for capacity-building in science technology and engineering education and research and entrepreneurship for the benefit of developing countries. In this context, explore ways to expand cooperation among all countries with particular attention to sharing resources available online,

(iv) Develop metrics to assess progress made by countries to implement STIP review recommendations for developing S&T and innovation policies and other recommendations they have acted upon and, if requested by these countries, to conduct periodic reviews to monitor such progress,

(v) Encourage the GAB to provide inputs to CSTD policy deliberations and documentation, invite the GAB to report on progress at the annual CSTD Sessions, and consider integrating a gender perspective into the STIP reviews, where appropriate.