

Advance Unedited Version

**Commission on Science and Technology for Development
Twelfth session
Geneva, 25–29 May 2009**

**Draft Resolution on "Science and Technology for
Development"**

The Commission on Science and Technology for Development recommends to the Economic and Social Council the adoption of the following draft resolution:

Science and technology for development

The Economic and Social Council,

Recalling its decision 2008/219 which requests the Secretary-General to report to the Commission on Science and Technology for Development at its twelfth session on the science, technology and innovation priority themes addressed during the current biennium.

Recalling the outcome document of the 2005 World Summit, which emphasizes the role of science and technology, including information and communication technologies, as vital for the achievement of the internationally agreed development goals, and *reaffirming* the commitments contained therein, especially support of efforts of developing countries, individually and collectively, to harness new agricultural technologies in order to increase agricultural productivity through environmentally sustainable means¹,

Recalling that UNCTAD is the Secretariat of the United Nations Commission on Science and Technology for Development,

Welcoming the work of the Commission on Science and Technology for Development on its two substantive themes "Development-oriented policies for a socio-economically inclusive information society, including policies relating to access, infrastructure and an enabling environment" and "Science, technology and engineering for innovation and capacity-building in education and research,"

Recognizing the critical role of innovation in maintaining national competitiveness in the global economy,

Taking note of the outcomes of the Commission Inter-sessional Panel Meeting in Santiago, Chile in November 2008 and the report prepared by the UNCTAD secretariat contained in document E/CN.16/2009/CRP.1

Taking note of the reports of the Secretary-General to the Commission on Science and Technology for Development

Welcoming the revised terms of reference of UNGIS to expand its mandate to include science and technology pursuant to General Assembly resolution A/res/62/208 at its 62nd session and High Level Committee on Programs decision² at its 17th session, 26-27th February 2009

Extending its appreciation to the Secretary-General for his role in helping to complete the aforementioned reports in a timely manner,

¹ A/60/1, para. 60

² UNGIS-4-Doc-5

Taking note that though there is wide consensus that technological innovation is a driver and critical source of sustainable economic growth in the new millennium, many developing countries have yet to benefit from the promises of science, technology and innovation (STI).

Stressing the role of education for all as a precondition for the development of science, technology and innovation.

Reaffirming that the training and retention of scientific, technological and engineering talent, mechanisms for the funding of research, the commercialization of scientific knowledge, the building of strategic partnerships for the transfer of technology, innovative financing strategies, and an innovation-friendly culture can play critical roles in harnessing scientific and technological knowledge for development.

Recognizing the role science, technology and engineering can play in developing solutions for the problems facing the world today including climate change, and the food and energy crises, and that most of the knowledge that countries need to address their most urgent social and economic problems already exist.

Extending its appreciation to UNCTAD for the particular attention given to the needs of African countries in the area of science and technology to stimulate economic growth and reduce poverty by undertaking Science, Technology and Innovation Policy (STIP) reviews for Angola, Ghana, Lesotho and Mauritania, and organizing training sessions.

1. *Invites* the Secretary General to initiate a process to develop and make available a guide for United Nations personnel in the preparation of United Nations Development Assistance Frameworks (UNDAFs) and Common Country Assessments (CCAs), and relevant stakeholders in the preparation of PRSPs, identifying opportunities that STI can provide at the country level towards eradication of poverty and achievement of the MDGs.

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

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

(i) *Mainstream* science and technology promotion and investment into their national development plans

(ii) Formulate and implement policies and programs to:

a. *Strengthen* science and mathematics education and mentorship for students in primary and secondary schools;

- b. *Expand* opportunities for science technology and engineering education and research for their population especially women and particularly in the emerging technologies such as biotechnology and nanotechnology as appropriate;
 - c. *Provide*, where possible, suitable working conditions for their scientific, technological and engineering talent, especially young graduates and women, in order to prevent brain drain;
 - d. *Develop* mechanisms, including innovative solutions for expanding rural power supply, and the provision of broadband access to poor communities in rural areas not covered by market-driven investment to ensure access to science, technology and engineering for women, youth, the rural poor, and other marginalized groups in all countries;
 - e. *Promote* research and development in scientific, technological and engineering fields, which supports, *inter alia*, grassroots food production and entrepreneurial activities of the rural population.
 - f. *Strengthen*, as appropriate, linkages between the private sector, academia and financial institutions and incentives for commercialization of research and development by promoting entrepreneurship, increased venture capital funding, the establishment of technology parks and incubators, and greater international collaboration;
 - g. *Increase* the number of full time researchers in science, technology and engineering;
- (iii) *Create* innovative funding strategies and compensation and reward structures in academic and research institutions to provide incentives for scientific and technological talent to remain within their countries and promote research directed to addressing national and regional development challenges;
- (iv) *Establish* international needs-based partnerships, where countries and their private sectors collaborate on research and development including the commercialization of research results to address similar development challenges especially those related to areas of health, agriculture, conservation, sustainable use of natural resources and environmental management, energy, forestry and the impact of climate change;
- (v) *Develop* a culture of innovation and entrepreneurship, support the development of technological capabilities in small and medium-size enterprises and promote incubators for promising technologies;
- (vi) *Launch* campaigns to raise awareness on the importance of innovation for wealth creation and national welfare through mass media and high-profile awards;

(vii) *Reaffirm* the essential role that Official Development Assistance (ODA) plays as a complement to other sources of financing for development, and fulfill, the internationally agreed commitments regarding ODA in order to contribute to the efforts of the developing countries in building their indigenous capabilities in science and technology.

(viii) *Make* considered decisions to balance short-term and long-term STI goals and policies, evaluating the advantages and disadvantages of procuring or licensing technologies, as compared with producing them indigenously;

(ix) *Focus* national efforts, when facing a generally low level of STI capacity, on building and strengthening indigenous scientific, technical, vocational and engineering capacities to select and use existing knowledge resources, in order to create jobs, generate wealth and achieve the MDGs.

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

(i) *Play* the role of a torch-bearer for innovation and innovation-oriented planning, and support efforts by national governments to integrate STI into national development strategies by providing a forum for developing countries, the international community, the STI policy research community and other interested parties to:

(a) *Share* and analyze available empirical evidence on technological earning and STI policy impacts, and

(b) *Identify* critical gaps in “innovation system” understanding that the policy research community might usefully address;

(c) *Provide* a forum to share best practices and information on new technologies, financing mechanisms, and regulatory measures for providing broadband connectivity in their respective communities; as well as a range of access strategies and technologies to supplement broadband internet access and support all levels of socio-economic activity in a country, with a focus on reaching women and people in rural areas;

(ii) *explore* the possibility of organizing an Internet-based STI collaborative network, in conjunction with UNCTAD, the Regional Economic Commissions and other appropriate stakeholders. This network could promote regional and global cooperation by collecting information related to science, technology and engineering capacity-building in education, research and innovation, technology development and transfer, prospects for commercialization of knowledge-based products, opportunities for collaboration and joint ventures and related issues. It could also serve as a repository of regional and sub-regional initiatives that could encourage further use of the Internet by all interested stakeholders.

(c) UNCTAD is encouraged to:

- (i) reaffirm its mandate in respect of science and technology for development and place greater emphasis on the role of innovation within its mandate.
- (ii) improve the existing collaboration on science and technology for development within the UN system, particularly with UNESCO, CSTD and the UN Regional Commissions, and with other appropriate stakeholders, including the World Bank;
- (iii) continue providing its expertise and analytical skills for science, technology and innovation policy (STIP) reviews and by organizing training sessions, particularly for African countries, aimed at providing information-based policy recommendations and proposed action plans to assist developing countries with their specific needs and circumstances
- (iv) develop a clearinghouse of common development challenges that can be addressed through scientific, technological and STI-related issues including financing and regulation and convene representatives of developing countries with similar concerns to explore concrete ways of engaging and partnering in solutions;
- (v) collaborate with less developed countries to create conditions that make them attractive to foreign direct investment in science and technology, including information and communication technologies;
- (vi) develop a training program for sharing best practices on STI capacity building in developing countries, using extra-budgetary resources
- (vii) continue to assist African countries in their efforts to build STI capacities through training and workshops, particularly in the areas of biotechnology and cyber-security, and invite donors to support the network of Centres of Excellence, currently sponsored by the Government of Italy, and expand it to include other regions.