

## **Draft Resolution on Science, technology and innovation 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 and contribution of science, technology and innovation (STI) in building and maintaining national competitiveness in the global economy, addressing global challenges and 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 on Information Society (WSIS) 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-oriented policies for a socio-economically inclusive information society, including policies relating to access, infrastructure, and an enabling environment,

*Recognizing* that local and indigenous culture and knowledge accumulated through the centuries are crucial in solving local problems,

*Recognizing* further that it is necessary to develop new business models which are accountable and facilitate scale up of technological innovation that reaches beneficiaries,

*Noting* that Geographic Information Systems (GIS) and geospatial tools and analysis provide important applications in urban planning and monitoring,

*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 Science, Technology and Innovation Policy (STIP) Review prepared by UNCTAD for the Dominican Republic, and welcoming the next STIP reviews planned for Oman, Thailand and Vietnam.

*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;

*Welcoming* the work of the Commission on its two current priority themes, “Science, Technology and Innovation for Sustainable Cities and Peri-urban Communities”, and “Internet Broadband for an Inclusive Digital Society”;

*Recognizing* that collaborative learning, cooperation and exchange of best practices are central to innovation, technology transfer, and entrepreneurship and involves absorptive and productive capacity-building at the individual and the organizational levels,

*Recognizing* that although rapid industrialization in developing countries is increasing the standard of living for many by offering employment opportunities and services for a better life, it has not been inclusive and has created several cross-sectoral challenges for urban governance, including imbalances in the quality of life and other social issues,

*Noting* that cities are centres of innovation and that the growth and development of countries as a whole will largely depend on the success, habitability and sustainability of their cities,

*Noting* that the challenges faced by cities and peri-urban communities in developing countries, in particular LDCs and small island states, differ widely from those of developed countries and require special analysis in the context of STI interventions,

*Recognizing* that science, technology and innovation can help achieve sustainable urban development through the application of high, low, new and emerging technologies taking into account innovative approaches to urban planning and institutional innovation, while accounting for the economic, environmental, cultural and social dimensions of urbanization,

*Recognizing* further that science, technology and innovation are necessary for sustainable urban development, to provide affordable solutions to mitigate the impact of climate change on vulnerable urban populations,

*Recognizing* the critical role of institutional reforms, financing and public-private partnerships, in addition to science, technology and innovation, in finding solutions to challenges related to sustainable urbanization,

*Noting* that architecture and engineering go hand in hand when planning, designing, building, retrofitting and maintaining cities, and are holistic, inclusive, mindful of specific requirements of all people, male and female, and ultimately provide places where people can live comfortably;

*Noting* the activities of Study Group 5 of the International Telecommunications Union (ITU) to address environmental dimensions of ICTs in cities and establishment of an ITU Focus Group on

Smart and Sustainable Cities for defining the role of ICTs in cities that aim to be environmentally sustainable,

*Noting* the global report on the *State of Broadband 2012: Achieving Digital Inclusion for All*, by the Broadband Commission for Digital Development is of relevance to sustainable cities and peri-urban communities

*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) Establish governance mechanisms that facilitate innovative, integrated, multi-disciplinary urban and peri-urban community planning. Urban projects should include targeted end-users and participation from relevant departments responsible for spatial planning, housing, water supply, energy supply, mobility, communications, health and sanitation, education and skills training, waste management, environmental protection, security and disaster resilience.

(ii) Put in place regulatory frameworks at the national, regional and local levels that mainstream issues of sustainability into urban projects and support business models that scale innovative solutions;

(iii) ~~Encourage~~ Invite local governments to establish public-private partnerships for mutual benefit, including to support higher education and vocational training in skills needed for an augmented urban workforce;

(iv) Encourage the integration of ICTs into the infrastructure of cities, where appropriate, to increase the efficiency of services, food supply and mobility; to provide for the safety, security and productivity of citizens; and to reduce environmental impacts;

(v) Encourage municipalities to join national and international networks for cooperation to learn from best practices in cities of other regions and countries;

(vi) Provide support for collaborative research involving universities and municipalities on the socioeconomic impact of urbanization, in order to support informed public policies;

(vii) Use ICT-based simulation tools that estimates future requirements of food, water, energy, housing, transport and other services; such as education, health, sanitation, waste management, communication and security in expanding urban areas, also taking into account the estimated growth of income for planning purposes;

(viii) Establish regional expansion plans that take into account the estimated demand for basic services and infrastructure of growing populations in cities and surrounding peri-urban and rural zones;

(ix) Promote the adoption of urban agriculture technologies as a means to supplement income and food supply;

(x) Promote technologies and business models that scale affordable, resource efficient housing for lower-income groups living in slums, as well as new inhabitants of urban areas;

(xi) Explore potential bilateral, regional and multilateral cooperation, especially between municipalities and other types of local government, on improving the resilience of cities and peri-urban areas against natural disasters and the impacts of climate change, for example, with the help of early-warning systems.

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

(i) With respect to CSTD, continue its role as a “torch-bearer” for innovation and to provide high-level advice to the ECOSOC and General Assembly on relevant science, technology and innovation issues, raise awareness amongst policymakers about the process of innovation and 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 local governments, SMEs and individual entrepreneurs;

(ii) Provide a forum for building repositories of best practices, successful local innovation models, case studies and experience on the use of science, technology and innovation in symbiotic relationship with ICT for sustainability, management and to provide solutions for challenges in key urban sectors in developing countries considering the special requirements of LDCs and small Island States;

(iii) Raise awareness among urban policymakers about the role of science, technology and innovation, and ICTs in facilitating integrated regional planning, spatial design and sustainable resource consumption and efficient management of services in cities and peri-urban communities in a gender sensitive manner.

(iv) Establish a systematic approach for strategy development related to science, technology and innovation, including harmonized norms and definitions.

(v) With respect to CSTD and UNCTAD, enhance treatment of ICT as an integral, empowering asset for science, technology and innovation within STIP Reviews.

(vi) Proactively seek funding for expansion of STIP reviews and their implementation in close cooperation with UN related agencies and international organizations.

(vii) Plan for periodic updates on progress made in countries for which STIP Reviews have been performed and invite those countries to report to the Commission on progress made, lessons learned and challenges in implementation of recommendations.

(viii) Encourage the GAB to provide inputs to its policy deliberations and documentation to report on progress at the annual CSTD Sessions, and to better integrate gender perspectives into the STIP reviews, where appropriate.

(ix) Highlight the importance of its work related to the implementation and follow-up of the STI and ICT areas related to the MDGs and in the post-2015 developmental agenda, and for the CSTD chair to report to appropriate ECOSOC reviews and meetings, including those related to the MDGs review process and the post-2015 agenda setting.

(c.) The international community is encouraged to:

(i) Explore innovative financing models as a means to facilitate investments in replicating STI based solutions to pressing societal challenges and infrastructural needs for sustainable development, including the management of cities and peri-urban communities in developing countries;

(ii) Establish STI platforms such as open repositories to share and access knowledge, information, experiences and best practices involving technology developments that address the particular urbanization needs and challenges of developing countries, especially LDCs and small Island States.

(iii) Harness ICTs and related social and scientific networks to foster “brain circulation” and the global knowledge society.

(iv) Facilitate university to university collaborations involving students and faculty exchanges, two way mobility, and cooperative research aimed primarily at increasing STI capacities and the cross border and trans-regional circulation of knowledge for sustainable development.

(v) Nurture joint collaborations on capacity building of STI human resources and global research infrastructure