

1999/61. Science and technology for development

The Economic and Social Council,

Recognizing the role of the Commission on Science and Technology for Development as a forum for the examination of science and technology questions, for improving understanding of science and technology policies for development and for the formulation of recommendations and guidelines on science and technology matters within the United Nations system, all in relation to development,

Recognizing also that the Commission, in carrying out its work, should pay special attention to the needs and requirements of developing countries, in particular the least developed countries and landlocked and small island developing States, and that it should take into consideration the relevant problems of countries with economies in transition,

Taking note with appreciation of the reports of the Commission's Working Group on Science and Technology Partnerships and Networking for National Capacity-Building¹⁶⁷ and its Panel Meeting on Biotechnology for Food Production and Its Impact on Development,¹⁶⁸

Recognizing that the economic potential of science and technology partnerships and networking is enormous and that those without the capabilities to form equitable partnerships and participate in networks risk being marginalized from active participation in the global economy,

Aware of the extremely precarious situation of science and technology in some countries, in particular those in Africa, and of the need for these countries to overcome the constraints that have adverse effects on the well-being of people, the development of nations and the competitiveness of their economies,

Taking note with satisfaction of the notes by the secretariat on a common vision on science and technology for development,¹⁶⁹ on budget and inter-sessional activities of the Commission¹⁷⁰ and on the coalition of resources,¹⁷¹ and other relevant documentation submitted to the Commission for consideration at its fourth session,¹⁷²

Recognizing the importance of science, technology and innovation policies, and noting with satisfaction that two such reviews, for Colombia¹⁷³ and Jamaica,¹⁷⁴ have been completed and that others are under way or awaiting financing,

Noting that the fourth session of the Commission was taking place twenty years after the United Nations Conference on Science and Technology for Development, held in Vienna from 20 to 31 August 1979, and reaffirming the increasing importance of science and technology in effectively addressing development challenges, and the role that the United Nations can play in this area,

Recalling its resolutions 1997/62 of 25 July 1997 on science and technology for development and 1998/46 and 1998/47 of 31 July 1998 concerning the restructuring and revitalization of the United Nations in the economic, social and related fields,

Recognizing that enhanced transparency and accountability are essential for the efficient and effective functioning of the Commission,

Welcoming the initiative taken by the United Nations Educational, Scientific and Cultural Organization in holding the World Conference on Science in Budapest from 26 June to 1 July 1999,

¹⁶⁷ E/CN.16/1999/2.

¹⁶⁸ E/CN.16/1999/3.

¹⁶⁹ E/CN.16/1999/4 and Corr. 1.

¹⁷⁰ E/CN.16/1999/5.

¹⁷¹ E/CN.16/1999/6.

¹⁷² E/CN.16/1999/7, E/CN.16/1999/8 and E/CN.16/1999/Misc.1-5.

¹⁷³ United Nations publication, Sales No. E.99.II.D.13.

¹⁷⁴ United Nations publication, Sales No. E.98.II.D.7.

ACTIVITIES AS FOLLOW-UP TO THE EARLIER WORK OF THE COMMISSION

A. SCIENCE AND TECHNOLOGY PARTNERSHIPS AND NETWORKING FOR NATIONAL CAPACITY-BUILDING

1. *Recommends* that developing countries and countries with economies in transition identify, in cooperation with all stakeholders:

(a) Priority areas for the development of technological capacity, where international partnerships and networking could play an essential role;

(b) The major needs of domestic firms in terms of technology, expertise and know-how, in order to map out clear objectives, expected output and monitoring tools;

(c) Useful services that could be provided to foreign public and private institutions interested in forming partnerships with domestic public and private institutions and that could help in establishing more equitable and balanced partnerships;

2. *Also recommends* that Governments explore ways and means of fostering partnerships among public and private institutions, *inter alia*, by creating an enabling policy, regulatory and legal environment, and by contributing information and knowledge, financing the development of research and development activities and infrastructure, and raising public awareness of the role and benefits of partnerships and networking in science and technology, and, where such processes already exist, that they should be updated;

3. *Further recommends* that Governments support partnerships and networking for both basic and applied research, with a view to enhancing national capacity-building;

4. *Requests* the secretariat of the Commission on Science and Technology for Development, using the resources it can mobilize:

(a) To identify and analyse best practices in partnering and networking;

(b) To build an inventory of opportunities for international science and technology partnerships and networking;

5. *Invites* Governments, the public and business sectors, academia and non-governmental organizations in industrialized countries to engage in partnerships and networking in science and technology with their counterparts in developing countries and countries with economies in transition in order to facilitate access to and the use and adaptation of new technologies, and to improve their technological capability and build national capacity;

6. *Recommends* that, given the extent of the burgeoning energy demand and the financial constraints in developing countries, partnerships and collaboration on renewable as well as on conventional sources of energy, such as those envisaged in the clean development mechanism and the joint implementation arrangements envisioned in the

context of the Kyoto Protocol¹⁷⁵ to the United Nations Framework Convention on Climate Change,¹³¹ should be increased in order to:

(a) Promote capacity-building in developing countries;

(b) Provide modern energy services to rural and unserved urban populations;

(c) Encourage private sector participation in the provision of electricity supplies under innovative arrangements such as build-operate-transfer or build-operate-own schemes;

7. *Also recommends* that the Commission collaborate more closely with United Nations bodies and specialized agencies of the United Nations system, in particular the United Nations Conference on Trade and Development, the United Nations Development Programme, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, the World Bank, the World Intellectual Property Organization and the United Nations Industrial Development Organization, to promote science and technology partnerships;

8. *Further recommends* that the least developed countries, in particular those in Africa, support their effective integration into the global process of mobilization of scientific knowledge and available technology, especially by:

(a) Supporting all initiatives aimed at the subregional regrouping of resources in the area of science and technology for development;

(b) Identifying equitable partnerships and placing due value on their scientists;

(c) Creating centres of excellence in priority areas and enhancing local education in science and technology skills;

B. BIOTECHNOLOGY FOR FOOD PRODUCTION

9. *Recommends* that the Commission, through its secretariat, initiate a dialogue that involves the private and the public sectors, non-governmental organizations and specialized biotechnology centres and networks, such as the Global Forum on Agricultural Research, with a view to fostering the exchange of information and ideas among scientists, policy makers, representatives of industry and end-users. Such a dialogue can also provide a forum in which to raise issues concerning global developments in biotechnology, such as intellectual property rights, biosafety, bioethics, "pharma-foods" and "terminator genes", and to raise public awareness and create a better understanding of the potential benefits of biotechnology and other critical issues;

10. *Also recommends* that Governments in developing countries and countries with economies in transition undertake, with the cooperation of the international community, the following strategies:

(a) Strengthen research capability, build national capacity in biotechnology and undertake training programmes to provide a skilled workforce;

¹⁷⁵ FCCC/CP/1997/7/Add.1, sect. I, decision 1/CP.3, annex.

(b) Identify and encourage the development of centres of competence in biotechnology in each country;

(c) Develop and maintain partnerships with centres of excellence and networks in all countries;

(d) Encourage linkages and interaction among the public and private sectors and research and development institutions;

(e) Encourage the participation of the scientific community in policy discussions on biotechnology, biosafety and bioethics and in increasing public understanding of the risks and benefits of this new technology;

11. *Requests* the secretariat of the Commission:

(a) To assist in identifying and disseminating balanced information on biotechnology, intellectual property rights and biosafety;

(b) To examine case studies of approaches to address issues related to technology, intellectual property rights and biosafety issues in a practical, understandable and concrete way;

12. *Requests* the Commission to collaborate with the United Nations Conference on Trade and Development in preparing the next issue of the *Advanced Technology Assessment System Bulletin* on biotechnology for food production;

13. *Recommends* that the Commission and its secretariat cooperate with other international and regional organizations active in biotechnology, such as the regional commissions, the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the World Bank, the United Nations Industrial Development Organization, the International Centre for Genetic Engineering and Biotechnology, non-governmental organizations and other international institutions such as the Consultative Group on International Agricultural Research, in particular to build understanding and to exchange information on biosafety regulation and capacity-building, including through case studies on (a) partnerships in biotechnology, (b) biosafety, (c) bioethics and (d) approaches to biotechnology and intellectual property rights issues;

C. COALITION OF RESOURCES

14. *Requests* the secretariat of the Commission, using the extrabudgetary resources already allocated for this purpose, to finalize the publication of the reports on the coalition of resources for the application of information and communications technologies in transmissions infrastructure, education and health, and to ensure the widest possible dissemination of the final report;

D. SCIENCE, TECHNOLOGY AND INNOVATION POLICY REVIEWS

15. *Recommends* that the Commission continue to liaise with the United Nations Conference on Trade and Development on science, technology and innovation policy reviews with interested countries in order to identify options for national action, especially those that foster technological capability and innovation and the transfer and diffusion of technology;

E. NEW SUBSTANTIVE THEME AND OTHER ACTIVITIES

16. *Decides* that the substantive theme for the inter-sessional period 1999–2001 shall be “National capacity-building in biotechnology”, with particular attention being paid to agriculture and the agro-industry, health and the environment. The theme shall include human resource development through basic science education, research and development, as well as their interdisciplinary aspects; the transfer, commercialization and diffusion of technology; increasing public awareness and participation in science policy-making; and bioethics, biosafety, biodiversity and the legal and regulatory matters affecting these issues to ensure equitable treatment;

F. COORDINATION OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT IN THE UNITED NATIONS SYSTEM

Mindful of the need to continue to strengthen the functioning of the Commission in the context of its restructuring, including its role regarding the coordination of science and technology for development,

Welcoming the steps taken by the secretariat of the United Nations Conference on Trade and Development to establish a web site for the dissemination of information regarding the activities of the Commission,

17. *Urges* the secretariat of the Commission to continue efforts, in collaboration with other United Nations bodies, including the regional commissions and the Ad Hoc Open-ended Working Group on Informatics, to establish an electronic network linking information on their activities in science and technology for development and to build awareness of scientific developments that are particularly important for fostering economic and social development;

18. *Requests* the secretariat of the Commission to continue to issue the regular newsletter updating activities in the United Nations system pertaining to science and technology for development, including information on plans for and the results of the inter-sessional activities of the Commission itself;

19. *Calls upon* the secretariat and Bureau of the Commission to identify and take advantage of opportunities to interact closely with bodies of the United Nations system in order to promote greater information exchange and coordination of activities in science and technology for development; such interaction should include participation by the secretariat in the relevant coordination meetings of the Consultative Committee on Programme and Operational Questions;

20. *Recommends* that every other year one panel meeting should be held in Geneva, following which the Bureau shall meet the Geneva-based delegations of member States and observers for one day to discuss with the delegations the status of the inter-sessional activities of the Commission and its efforts to coordinate activities of the United Nations system pertaining to science and technology for development;

21. *Agrees* to include in its agenda the item entitled “Functioning of the Commission on Science and Technology for Development, including its role in coordinating science and technology for development”, and requests the secretariat of

the Commission to prepare a succinct analytical report on relevant activities within the United Nations system, including the outcome of the World Conference on Science, for consideration under this item.

*46th plenary meeting
30 July 1999*