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HUMAN RIGHTS AND SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS

Developments elsewhere in the United Nations system of interest to the Commission

Further report of the Secretary-General

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GE.79-10097

INTRODUCTION

1. Various resolutions of the General Assembly and of the Commission on Human Rights require thorough and continuous interdisciplinary studies of the human rights problems arising from developments in science and technology as well as the strengthening of co-operation and co-ordination between United Nations organs and specialized agencies in this field. 1/ Particularly important is the request of the General Assembly in its resolution 3268 (XXIX) of 10 December 1974 that the Commission "draw up a programme of work" in connexion with human rights and scientific and technological developments. In drawing up such a programme, the Commission needs to know what is taking place elsewhere in the United Nations system in this field in order to ensure, on the one hand, that there is no overlapping between its activities and those of other organs, and on the other hand, that the human rights aspects of scientific and technological developments are taken fully into account. With these considerations in mind, the Secretary-General prepared and submitted to the Commission at its thirty-third session a report (E/CN.4/1234) containing a general description of the work which had been or was being undertaken in the United Nations system outside the Commission on Human Rights in connexion with scientific and technological developments and an account of developments relating to three particular topics which appeared to deserve the particular attention of the Commission. In paragraph 3 of the report it was pointed out that the report would be brought up to date for subsequent sessions of the Commission. Accordingly, a further report (E/CN.4/1276) was submitted to the Commission at its thirty-fourth session.

2. New developments have taken place since that report relating in particular to the forthcoming United Nations Conference on Science and Technology for Development, to the formulation of a harmonized science and technology policy for programmes within the United Nations system and relating to institutional arrangements for science and technology, particularly the transfer of technology to developing countries. The present report which contains a brief description of new developments in these three fields should be read in conjunction with the first two reports mentioned above.

1/ E/CN.4/1234, paragraph 1.

I. FORTHCOMING UNITED NATIONS CONFERENCE ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

3. On 21 December 1976, the General Assembly adopted resolution 31/184, entitled "United Nations Conference on Science and Technology for Development", in which it decided that the Conference should be convened during 1979 and that the Committee on Science and Technology for Development (CSTD) should act as the Preparatory Committee for the Conference. 2/

4. By General Assembly resolution 32/115 of 15 December 1977, it was decided that CSTD when acting as Preparatory Committee for the Conference, should be open to the participation of all States as full members.

5. The Preparatory Committee for the Conference held its first session 3/ at United Nations Headquarters from 31 January to 14 February 1977.

6. The second session of the Preparatory Committee 4/ was held at Geneva from 23 January to 3 February 1978.

7. The subject areas and sub-topics adopted by the Preparatory Committee "as a means for identification and practical illustration of substantive issues" on the Conference agenda are set out in its resolution 3 (II) 5/ as follows:

"1. Food and agriculture with as its sub-topics, agriculture, technology and their improvement; nutrition; fisheries; food storage and processing;

"2. Natural resources including energy, with, as sub-topics, renewable and non-renewable energy, conventional and non-conventional sources of energy; development and conservation; national management and utilization;

"3. Health, human settlement and environment; medicinal plants and pharmaceuticals; health services; housing, social services and environment."

8. Resolution 4(II) of the Preparatory Committee 6/ reaffirmed the determination of the world community to achieve the accelerated development of science and technology, including their application in the development process at the national, sub-regional, regional and interregional levels, with increased international

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2/ See E/CN.4/1276, paragraph 3.

3/ See Official Records of the General Assembly, Thirty-second session, Supplement No. 43 (A/32/43 and Corr. 3). See also E/CN.4/1276, paragraphs 12-16.

4/ Second special session of the Committee on Science and Technology for Development acting as the Preparatory Committee.

5/ Adopted by the Preparatory Committee at its 19th meeting on 3 February 1978.

6/ Ibid.

co-operation. It noted that the decisions of the Conference should lead to a strengthening of the capabilities of developing countries to generate their scientific and technological and productive capacities, so as to enable them to solve their own problems and meet their own needs. It also called attention to the need for commitment to action at the national, regional and international levels to solve the problems of the application of science and technology to development.

9. The subject areas which the Preparatory Committee recommended for study and action concern activities at the national, regional and international levels. Those recommended for the national level are: policies and priorities for science and technology; infrastructure and regulation for science and technology research and development; systems for education and training; availability of entrepreneurs and managerial skills; human and financial resources; information systems in science and technology; extension services for technological application; comprehensive surveys of natural resources; interaction between research and development producers and users; dependency of the productive sector on imported technology; systems for promoting industrial technologies; technological innovative systems; capability for choice of technology; criteria for choice of technology; machinery for evaluation of technological alternatives.

10. Subject areas which were proposed for the regional level are: identification of problems of common interest, coherent systems for educational, scientific and technological co-operation; economic and technological co-operation; agreements among Member States; arrangements for common training centres; joint investment in research and development programmes of common interest; and co-ordination among international organizations for regional development programmes.

11. Those for the international level are: appropriateness of programmes for education and training of personnel from developing countries in developed countries; migration of talents and skills from developing countries; need for real concern about research and development needs of developing countries; international infrastructure for science and technology for development; financial resources; the role of international financial institutions and nature of financial assistance; investments in the field of science and technology in developing countries; human and financial resources devoted to military research and development; standards and practices in transfer of technologies; industrial property systems and licensing arrangements; relevant scientific and technological information systems.

12. Under other provisions of the same resolution, the Preparatory Committee: decided to begin at its third session and on the basis of documentation requested, including the recommendations of regional meetings, substantive work on a Programme of Action to be adopted by the Conference whose concerted implementation should provide the basis for solution of problems and obstacles affecting the application of science and technology to the development of developing countries and requested accordingly the Secretary-General of the Conference to submit to the Preparatory Committee at its third session a draft outline of a Programme of Action on the basis of the reports of regional meetings and national summaries to be submitted.

13. On the subject of documentation, Preparatory Committee resolution 5 (II) recommended that secretariats of regional commissions which had not yet done so should immediately begin preparation of the regional documents, in full interaction with member States of the region, for presentation to the third session of the Preparatory Committee in September 1978; and that all agencies and other concerned bodies of the United Nations system and other bodies, as appropriate, not belonging to the system should be invited to provide the secretariats of the regional commissions with inputs for the preparation of regional papers.

14. At the second session of the Preparatory Committee it was also agreed that the Conference 7/ would take place in Vienna from 20 to 31 August 1979. In other actions the Committee recommended draft rules of procedure for the Conference and approved arrangements for the preparation of documentation.

15. At its fourth session, held in Geneva from 6 to 10 February 1978, the Committee on Science and Technology for Development discussed inter alia a report of the Advisory Committee on Science and Technology for Development (ACAST) relating to the United Nations Conference on Science and Technology for Development. 8/ The report reviews the work undertaken by ACAST in preparing draft guidelines to be made available to Governments for use in the preparation of national papers for submission to the Conference.

16. In addition, at its twenty-third session held at Geneva from 7 to 18 November 1977, the Advisory Committee made several suggestions concerning the organization of the Conference, the selection of subject areas, the convening of regional meetings and seminars, the involvement of the scientific community, the Advisory Committee's own contribution to the preparations for the Conference, the implications of human rights associated with advances in science and technology, the agenda for the Conference and the "programme of action" which the Conference may wish to adopt. 9/

17. At its fourth session, CSTD took various decisions of relevance to the Conference on Science and Technology for Development.

18. In decision 2 (IV), 10/ CSTD took note of ACAST's efforts in updating the World Plan of Action and recommended that the Economic and Social Council, at its first regular session for 1978, should examine the need to review the mandate given to ACAST in Council resolution 1900 (LVII) of 1 August 1974 in the light of the decisions taken by the Preparatory Committee for the United Nations Conference on Science and Technology for Development at its first session and taking into account the views expressed in the Committee's discussions. 11/

7/ A/33/43.

8/ E/C.8/57.

9/ Ibid.

10/ Adopted at its 100th meeting, on 10 February 1978.

11/ E/C.8/58, paras. 17-21.

19. In decision 11 (IV) entitled "Human rights and scientific and technological developments" 12/ the Committee took note of the note by the Secretary-General on human rights and scientific and technological developments (E/C.8/51) and drew the attention of the Preparatory Committee for the United Nations Conference on Science and Technology for Development to relevant resolutions mentioned therein. During the discussion on this item, the importance which should be attached to the protection of human rights on the basis of the pertinent provisions of the Proclamation of Teheran 13/ in the preparation of the United Nations Conference on Science and Technology for Development, was stressed.

20. By the resolution, 1978/5 of 4 May 1978 the Economic and Social Council requested ACAST to submit to the Preparatory Committee, at its third session, "its preliminary views on the application of science and technology for the development of developing countries, with emphasis on obstacles which may arise" ACAST was asked to use, for illustrative purposes only, the five subject areas elaborated by the Preparatory Committee.

21. In response to this request, the Advisory Committee constituted an in-sessional ad hoc working group on obstacles, in which the respresentatives of FAO, UNESCO, UNIDO and WIPO also participated. This ad hoc group met during the twenty-fourth session of the Advisory Committee held at Geneva from 31 July to 11 August 1978 and after reviewing the background document prepared by United Nations Office for Science and Technology and the report of the in-sessional ad hoc Working Group on this subject decided that further work should be undertaken incorporating the views expressed by the Committee with these documents and to prepare a comprehensive document that would adequately meet the expectations of the Economic and Social Council. 14/

22. In its resolution 1978/70, at 4 August 1978, the Economic and Social Council urged all specialized agencies and other bodies concerned in the United Nations system, and also organizations outside the system, to ensure that the documents required for the future sessions of the Preparatory Committee for the United Nations Conference on Science and Technology for Development, and for the Conference itself, contain clear and specific recommendations, and that their efforts are effectively co-ordinated, in order to make the best use of available resources for the purpose of attaining the goals of the Conference.

23. The Council requested the Preparatory Committee, at its third session, to give careful consideration to the substantive issues, and particularly to the draft programme of action which will be dealt with by the Conference, bearing in mind the principles of the New International Economic Order.

24. At its twenty-fourth session, the Advisory Committee decided that at the time of the Conference in Vienna there will be two fora: Forum A will take place in the week preceding the Conference and will be a structured meeting with participation of a limited number of scientists, technologists and planners and Forum B will consist of all other non-governmental organizations in consultative status with the Economic and Social Council.

12/ Adopted at its 100th meeting on 10 February 1978.

13/ Final Act of the International Conference on Human Rights, (United Nations publication, Sales No.E.68, XIV,2), chap.II.

14/ A/CONF.81/PC, paras. 12-15.

25. ACAST also approved a plan for meetings of the scientific and technological communities and development planners on a non-governmental basis during the period preceding the Conference. 15/

26. These meeting would start with a world symposium on the impact of science and technology on global problems, to be held in Tallin, Soviet Union, during the second week of January 1979 and to be sponsored by the Soviet Academy of Sciences and the State Committee on Science and Technology. 16/

27. This meeting will be followed by another one on "the scientific aspects of the application of science and technology for development" to be held in Singapore in March. A third symposium on "technology for development" will be held in Abidjan, Ivory Coast, in May and a fourth one on "Science and technology in development planning" will be held in Mexico from 28 May to 1 June 1979. 17/

II. FORMULATION OF A SCIENCE AND TECHNOLOGY POLICY FOR DEVELOPMENT

28. In the recent past, bodies of the United Nations system have adopted a number of decisions with a view to the formulation of a science and technology policy for development. The Economic and Social Council, by paragraph 2 of its resolution 1978/5 of 4 May 1978, requested ACAST to give its preliminary views on the application of science and technology to the development of developing countries with emphasis on obstacles which may arise, and in that context to utilize, for illustrative purposes only, the five subject areas selected and defined by the Preparatory Committee for the United Nations Conference on Science and Technology for Development at its second session (see para. 22 above). Moreover, in pursuance of decision (IV) of CSTD, 18/ ACAST is to report on the formulation of a harmonized science and technology policy for programmes within the United Nations system. Finally, resolution 4 (II) of the Preparatory Committee for the Conference reaffirmed the determination of the world community to achieve the accelerated development of science and technology, including their application in the development process at the national, sub-regional, regional and inter-regional levels (see paras. 8-9 above).

29. At its twenty-fourth session, ACAST constituted a steering committee to prepare for a colloquium on "Science, Technology and Society Needs, Challenges and Limitation of Science and Technology as Factors in Development", to be held in Vienna in the week preceding the Conference. Furthermore, in association with the Department of International Economic and Social Affairs, ACAST is playing a role in Conference-related seminars and meetings which are described in document A/CONF.81/INF.3 and its revisions.

30. At its seventy-second session the Administrative Committee on Co-ordination (ACC) adopted a report, 19/ prepared by an interagency drafting group, which was based on written contributions from and discussions between organizations of the United Nations system and described the way in which the respective programmes of these organizations have linked science and technology to socio-economic development and international co-operation. ACC agreed that this document,

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15/ A/CONF.81/PC/para. 17.

16/ Ibid.

17/ Ibid.

18/ E/C.8/58, chap. I.

19/ E/AC.51/90/Add.2 (Part I).

which will also be presented at the Preparatory Committee for the United Nations Conference on Science and Technology at its Third session, 20/ could serve as a cross-organizational programme analysis on science and technology for the Committee for Programme and Co-ordination (CPC).

31. The report is divided into six chapters, dealing with the choice of technology, including research into new science and technology and the application of new technologies appropriate to the needs of developing countries; the transfer of technology, including mechanisms for the exchange of scientific and technological information and experiences that are significant to development; elimination of obstacles to the better, utilization of knowledge and capabilities in science and technology for development; methods of integrating science and technology into economic and social development; support for national policy-making in the sphere of science and technology and the building-up and expansion of institutional systems for science and technology in developing countries and new forms of international co-operation in the application of science and technology, including economic co-operation among developing countries.

32. A further ACC report, 21/ dealing with education in science and technology, identified the lack of knowledge and skills, and of funds and facilities necessary to import them, as one of the most serious obstacles to the application of science and technology to development.

III. INSTITUTIONAL ARRANGEMENTS IN THE FIELD OF THE TRANSFER OF TECHNOLOGY

33. The General Assembly, in its resolution 32/178 of 19 December 1977, took note of the report of the Secretary-General on the establishment of a network for the exchange of technological information (E/6055) and the note by the Secretary-General concerning the patent information system (E/6054), prepared in response to General Assembly resolution 3507 (XXX), and expressed its thanks to the Inter-Agency Task Force on Information Exchange and the Transfer of Technology and to the World Intellectual Property Organization (WIPO) for these reports (see E/CN.4/1276, para. 27). The Assembly also welcomed the progress achieved thus far in determining the shape of a technological information network, useful to all countries, in particular developing countries, in studying regional and national capacities and needs in technological information, and particularly in the publication of a user-oriented pilot directory of information services of the United Nations system.

34. The General Assembly requested the Secretary-General to continue the preparatory studies and assessments of existing information networks already undertaken.

35. The General Assembly further requested the Secretary-General, in co-operation with the regional commissions, the United Nations Conference on Trade and Development (UNCTAD) and the United Nations Industrial

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20/ A/33/298, para.25.

21/ E/AC.51/94.

Development Organization (UNIDO), as well as with WIPO, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and other specialized agencies concerned, to develop alternatives for further work on the network, including schedules, costs and user-oriented operational suggestions, together with suggestions on sectors and/or subject areas where there is a particular requirement for an international information network, using the best possible experience in the fields of identification of users needs, information exchange and the transfer of technology.

36. The General Assembly also requested ACC in view of the fruitful collaboration developed by the Inter-Agency Task Force among agencies of the United Nations system on measures undertaken thus far in pursuance of General Assembly resolution 31/183, to make appropriate arrangements to continue such support and co-ordination.

37. The General Assembly reaffirmed that all countries, particularly developed countries, should take measures as a matter of high priority to improve the availability and quality of the technological information, including advanced technologies, needed to assist developing countries in the selection of technologies relevant to their needs. It urged the Secretary-General of UNCTAD and the Executive Director of UNIDO and the heads of other relevant agencies to continue their efforts to assist developing countries in establishing centres for the transfer and development of technology at the national and regional levels and in providing extension services, and, in this context, to bear in mind the possibilities of the network concept. It endorsed Industrial Development Board decision V (XI) regarding the pilot operation of an industrial and technological information bank and recommended that work on the network, as well as on the bank, should take into account their interrelationship and also the preparations for the United Nations Conference on Science and Technology for Development.

38. At its fourth session, CSTD adopted decision 6 (IV), in which it recommended the publication of a pilot directory of United Nations information services; and requested the ACAST Ad Hoc Working Group on policy for science and technology within the United Nations system, bearing in mind General Assembly resolutions 3507 (XXX) and 32/178 and in co-operation with the United Nations Organizations and agencies concerned, to examine the feasibility of a pilot network for information systems.

39. At its twenty-fourth session, the Advisory Committee considered this request and in the light of suggestions made by regional commissions and a number of specialized agencies and organizations of the United Nations system as well as of subject areas selected in relation to the Conference on Science and Technology for Development and four areas associated with the UNIDO industrial and technological information bank, Advisory Committee recommended the following three specific areas for the implementation of the network: agro-industries, including agricultural machinery and implements; technologies for low-cost construction; and renewable sources of energy. 22/

22/ A/CONF.81/PC paras. 59-60.

40. As regards the feasibility of the pilot network in the field of areas selected, the need was felt for more co-ordinated efforts between the proposed network and the regional centres for the transfer of technology; assistance to the regional centres; and harmonization of efforts of the agencies participating in the network and centres in developing countries as well as regional centres. 23/

41. At its twenty-fourth session, ACAST in addition to approving plans for further work on a study it has been requested to prepare on obstacles to the application of science and technology for development in developing countries (see paras. 20 and 33 above). The Advisory Committee also suggested the establishment of either a new agency, a new programme or a centre as possible mechanisms for harmonizing United Nations policy in science and technology. The new agency envisaged in the first alternative would be charged with the overall co-ordination of science and technology for the entire system; this proposal was considered as the most extreme institutional option. The second alternative proposed, the new programme, would remain within the United Nations and would be responsible primarily for administering a fund for science and technology activities. The third alternative suggested was to have a centre for concerted action and co-ordination on science and technology even if the proposal for a new programme was not adopted. The rationale behind the establishment of this centre lay in the need to systematize and synthetize information, as a minimum, on all science and technology programmes and strategies conducted through the system. Finally, it was understood that a decision to implement any of these alternatives was the responsibility and prerogative of Member States. 24/

23/ Ibid., para. 61.

24/ A/CONF.81/PC, paras. 38-42.