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**REPORT
OF THE
INTERGOVERNMENTAL
COMMITTEE ON SCIENCE
AND TECHNOLOGY FOR DEVELOPMENT**

GENERAL ASSEMBLY

OFFICIAL RECORDS: FORTY-FOURTH SESSION

SUPPLEMENT No. 37 (A/44/37)



UNITED NATIONS

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UNITED NATIONS

New York, 1989

NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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Forward by the Chairman of the Intergovernmental Committee
on Science and Technology for Development

The global landscape, since the Vienna Conference of 1979, has undergone a substantial transformation. Among the positive dimensions of this transformation, we find the significant improvement of the international political climate - one of the by-products of the present level of understanding prevailing in East-West relationships. It presages a period of reduced global tensions. Among the negative dimensions of that transformation, it appears that the international economic, scientific and technological climate of the 1980s has increased centripetal and centrifugal forces in the world. The centripetal forces are producing a greater integration of developed market economies. The centrifugal forces show a trend towards a reduction of the competitiveness and relative weight of products of developing countries in international markets. That trend, which increases asymmetry, is related to new technologies for goods and processes that have changed the patterns of production and structure of services. This has highlighted the paradox of simultaneous excess of power and excess of impotence in a planetary dimension. That paradox must be overcome by concerted actions if we are to increase in a common world the power of humanity over its own destiny.

This was the setting in which the Intergovernmental Committee on Science and Technology for Development met to take stock of the implementation of the Vienna Programme of Action on Science and Technology for Development during the past decade and to chart the course for the future. There was near unanimity that the high aspirations of the Vienna Conference remain largely unfulfilled. None the less, the principal focus of the Vienna Programme of Action, which brought the dimensions of science and technology to the forefront of the multilateral agenda, remains not only valid, but has become more crucial. It seems clear, however, that, in spite of the validity of the focus, the international community has yet to design the frame and mobilize the means and the wisdom to marshal the immense power of modern science and technology for the good of human kind, particularly those who inhabit the developing world. Science and technology have not been fully integrated into the mainstream of macro-economic strategies and management of the developing countries and in their international economic relations.

It was to this challenge that the Committee addressed itself, bearing in mind that the present is a propitious time in view of the impending formulation of a new international development strategy, the convening of a special session of the General Assembly on revitalizing economic growth and development, the Second United Nations Conference on the Least Developed Countries and the proposed second international conference on environment. Alongside the traditional economic tools, such as trade, aid and investment, a major new dimension, namely, endogenous capacity-building of developing countries in science and technology, needs to be more fully and organically integrated into the above-mentioned agenda of multilateral diplomacy. Endogenous capacity-building in science and technology, through national policy dialogues among stakeholders in the development process, is a concept whose time has clearly come. Developing countries will continue to bear the brunt of the future effort. Their difficulties in obtaining access to new and advanced technologies, however, have increased for several reasons, including the absence of a suitable external economic environment. That is why the international community at large, and the United Nations system in particular, would need to play a more dynamic and a more direct role to complement domestic efforts. In fact, science and technology will continue to be all pervasive and impinge upon all

sectors of life. Thus, the time has come to acknowledge that an autonomous ability to take informed and independent decisions on the consequences of the application of science and technology is crucial to accelerated and harmonious development. Such autonomous ability will also enable developing countries to exploit more rationally their natural resources without inflicting on the environment the damages caused by the development process experienced by the forerunners of our industrial society. That was the context in which the Intergovernmental Committee chose as the substantive theme for its eleventh session "Ways and means to ensure the participation of developing countries in international co-operation for research on and development of environmentally sound technologies, as well as the rapid and effective transfer of such technologies to those countries".

An essential component of endogenous capacity is technology assessment, that is, the capacity to make a socio-economic evaluation of the impact and implications of technologies and, in particular, new technologies, in order to be able to introduce, through adequate management, necessary structural and policy adjustments to maximize the opportunities and minimize the risks of the integration of each country into the international framework. While many developed countries have acquired such a capacity, most developing countries take vital economic decisions without being fully aware of the intrinsic implications of technologies. The Advance Technology Alert System (ATAS) of the United Nations Centre for Science and Technology for Development is attempting to fill that void. None the less, that process needs to be taken forward. Also stated in the meetings was the concern that the General Assembly should have at its disposal the necessary inputs and background information on the scientific and technological dimensions of the global issues that are the subjects of its debates. The Intergovernmental Committee on Science and Technology for Development, as the only policy-making and co-ordinating global forum on science and technology in the United Nations system, can assist the Assembly in this respect. Accordingly, it has resolved that the substantive themes that it considers at future sessions shall be chosen among subjects with major science and technology dimensions of particular significance for the debate of the Assembly.

The Committee also gave considerable attention to the need for the United Nations system to manifest greater resolve and will to harmonize its activities and focus its attention at the individual country level through periodic impact assessments and inter-agency missions. Designed at the request of interested developing countries, those missions engage in a collective dialogue with the different stakeholders in the development process in order to ensure that the combined resources of the United Nations system more effectively serve national priorities. In that process, experience has shown that particular attention should be given to demand-driven dimensions related to the productive sector.

Effective application of science and technology to development requires the mobilization of the full gamut of national and global resources including, in particular, the wealth of human resources. In addition, it is also necessary to assemble and apply the necessary critical mass of financial resources. Given the reality that a large self-sustaining multilateral financing system is unlikely to materialize in the near future, the time has come to explore other modalities, such as a coalition of national, bilateral and multilateral resources which could be channelled to support the process of endogenous scientific and technological capacity-building. The United Nations Fund for Science and Technology for Development and the United Nations Centre for Science and Technology for

Development should jointly pursue that idea and present to the Committee detailed proposals at its next session.

In sum, the Committee, after reviewing the implementation of the Vienna Programme of Action and deciding on the activities of the Centre for Science and Technology for Development, considers that, being the only forum in the United Nations system with a mandate in the field of science and technology, it has to reassert itself as a mature and farsighted body, designed to reconcile policy differences and to render more effective assistance to global debate. It was in that spirit that resolution 1 (X) was accepted by consensus and recommended for adoption by the General Assembly.

I. INTRODUCTION

1. The General Assembly, in its resolution 34/218 of 19 December 1979, entitled "United Nations Conference on Science and Technology for Development", decided to establish an Intergovernmental Committee on Science and Technology for Development. The Assembly also decided that the Committee should be open to the participation of all States as full members and that the representation of Member States in the Committee should be at a high level.

2. The General Assembly also decided that the Committee should submit its reports and recommendations to the Assembly through the Economic and Social Council, which may transmit to the Assembly such comments on the reports as it deems necessary, particularly with regard to co-ordination.

II. RESOLUTIONS AND DECISIONS ADOPTED BY THE INTERGOVERNMENTAL COMMITTEE ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT AT ITS TENTH SESSION (21 August to 1 September 1989)

3. At its tenth session, the Intergovernmental Committee adopted the following two resolutions (resolutions 1 (X) and 2 (X) and one decision (decision 1 (X)).

A. Resolutions

1 (X)

The Intergovernmental Committee on Science and Technology for Development recommends to the General Assembly the adoption of the following resolutions:

IMPLEMENTATION OF THE VIENNA PROGRAMME OF ACTION
ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

A

End-of-decade review of the Vienna Programme of Action
on Science and Technology for Development and its
revitalization

The General Assembly,

Recalling its resolution 34/218 of 19 December 1979, in which it endorsed the Vienna Programme of Action on Science and Technology for Development, 1/

Stressing the increasing importance of science and technology for development in the context of the rapidly changing international economic environment,

Noting with great concern that the effect of increasing disparities in scientific and technological capabilities between the industrialized countries and the developing countries as a whole have contributed to a widening of the economic gap between them,

Stressing the central role that science and technology play as vital instruments for the improvement of the quality of life and the eradication of poverty in the context of the promotion of economic growth and sustained development in developing countries,

Expressing concern that the absence of a favourable external economic environment has adversely affected the capacity of developing countries to foster and finance their activities concerning science and technology for development,

1/ Report of the United Nations Conference on Science and Technology for Development, Vienna, 20-31 August 1979 (United Nations publication, Sales No. E.79.I.21 and Corr.1 and 2), chap. VII.

Emphasizing the need to enhance human resources development in order to promote the endogenous capacity in science and technology of developing countries, in particular to face the challenges of development and accelerated technological change posed by the present scientific and technological revolution,

Taking note of the report of the Secretary-General on the end-of-decade review of the implementation of the Vienna Programme of Action, 2/

1. Reaffirms the validity of the Vienna Programme of Action on Science and Technology for Development and its basic goals, and expresses concern regarding its implementation;

2. Considers that science and technology should be one of the major components in the deliberations of the special session of the General Assembly on international economic co-operation, in particular the revitalization of economic growth and development of the developing countries, the Ad Hoc Committee of the Whole for the Preparation of the International Development Strategy for the Fourth United Nations Development Decade, the Second United Nations Conference on the Least Developed Countries and the proposed United Nations conference on environment and development.

B

Endogenous capacity-building in science and technology

The General Assembly,

Recalling the relevant parts of the Vienna Programme of Action on Science and Technology for Development,

Stressing that the endogenous capacity of developing countries in science and technology lies, inter alia, in their capacity to choose, acquire, adapt, utilize and innovate technologies, including new ones, through institutional mechanisms for technology assessment in the areas of priority action,

Emphasizing that the building by developing countries of endogenous capacity for science and technology is of major concern to the United Nations system,

Recalling also resolutions 4 (VIII) of 6 June 1986 3/ and 1 (IX) of 7 August 1987 4/ of the Intergovernmental Committee on Science and Technology for Development, in which the Committee recommended that the Centre for Science and Technology for Development of the United Nations Secretariat should carry out studies on helping interested Member States to identify

2/ A/CN.11/89.

3/ Official Records of the General Assembly, Forty-first Session, Supplement No. 37 (A/41/37), sect. II.A.

4/ Ibid., Forty-second Session, Supplement No. 37 (A/42/37), sect. II.A.

priority activities in science and technology for development, in accordance with national development plans and objectives, so as to lead to the strengthening of their endogenous capacities,

Taking note with appreciation of the work of the Centre for Science and Technology for Development in initiating pilot studies on endogenous capacity-building in some selected countries and welcoming the close co-operation between the Centre for Science and Technology for Development and the United Nations Fund for Science and Technology for Development in undertaking the studies and in planning additional studies in the future,

Recalling further the sections of resolution 1 (IX) of the Intergovernmental Committee on Science and Technology for Development on the problems and requirements of the least developed countries in the field of science and technology, and emphasizing in that regard the need to enhance the level of commitment and support for the special needs of the least developed countries in that area,

Stressing the importance of the continued integration of women in the development process, particularly in developing countries, and, in that context, recalling resolution 2, adopted on 31 August 1979 by the United Nations Conference on Science and Technology for Development, 5/ and the relevant parts of the Nairobi Forward-looking Strategies for the Advancement of Women 6/ in the field of science and technology,

1. Calls upon the organizations of the United Nations system to devote increased attention to national capacity-building in science and technology, in accordance with the development objectives, priorities and plans of developing countries, and to enable them to take effective measures to build better and more sustainable institutions, strengthen human resource capacities, and develop and adapt technology;

2. Stresses that international co-operation to foster the endogenous capacity-building of developing countries, in accordance with their autonomous decision-making in science and technology, must also be oriented to the demand-driven priorities in order to support the efforts of developing countries in economic growth and development;

3. Emphasizes that international co-operation to foster endogenous capacity-building should give particular attention to management of technology in order to cope with technological change and promote technological innovation;

5/ Report of the United Nations Conference on Science and Technology for Development, op. cit., chap. VI, sect. A.

6/ Report of the World Conference to Review and Appraise the Achievements of the United Nations Decade for Women: Equality, Development and Peace, Nairobi, 15-26 July 1985 (United Nations publication, Sales No. E.85.IV.10 and corrigendum), chap. I, sect. A.

4. Calls upon the United Nations system to provide sustained support to the process of building the endogenous capacities of developing countries in science and technology, including their capacity for assessment of technology;

5. Urges the Centre for Science and Technology for Development and the United Nations Fund for Science and Technology for Development, in co-operation with other bodies of the United Nations system, to continue to implement further pilot studies;

6. Also urges the United Nations Development Programme and other interested bodies of the United Nations system, as well as major donor countries, to support the implementation of those studies;

7. Invites the Advisory Committee on Science and Technology for Development to provide expert advice and support for that endeavour;

8. Requests the Secretary-General to submit an interim progress report on the implementation of the present resolution to the Intergovernmental Committee at its eleventh session.

C

Co-ordination and harmonization of activities
in the field of science and technology

The General Assembly,

Recalling the relevant parts of the Vienna Programme of Action on Science and Technology for Development relating to co-ordinated implementation of the Programme by the United Nations system and the formulation of policy guidelines for the harmonization of policies of the organs, organizations and bodies of the United Nations system in regard to activities in the field of science and technology,

Also recalling resolution 4 (IX) of 7 August 1987 of the Intergovernmental Committee on Science and Technology for Development, 4/ which provided the framework for the formulation of policy guidelines for the harmonization of activities of the organizations of the United Nations system in science and technology for development,

Having considered the report of the Secretary-General on the activities of the Centre for Science and Technology for Development, 7/ which, inter alia, analysed and provided information on harmonization of science and technology activities within the United Nations system,

Reaffirming the leadership role assigned to resident co-ordinators of the United Nations system to harmonize the efforts of the different organizations of the system, in accordance with the priorities of each Government,

7/ A/CN.11/88.

Taking note of the guidelines suggested in paragraph 66 of the report of the Secretary-General, 1/

1. Calls upon the governing bodies of the organizations of the United Nations system, including the United Nations Fund for Science and Technology for Development, to enhance co-ordination and harmonization at the country level, including the inter-agency missions, at the request of interested developing countries, through the office of the resident co-ordinator, in order to increase coherence and efficiency in responding adequately to the priorities in science and technology established by each developing country;

2. Requests the Director-General for Development and International Economic Co-operation to ensure close monitoring and follow-up of the mandated programmes and activities of the United Nations system in the areas of science and technology for development for the successful implementation of the Vienna Programme of Action on Science and Technology for Development and to report thereon regularly to the Intergovernmental Committee.

D

Financing of science and technology for development

The General Assembly,

Recalling the relevant parts of the Vienna Programme of Action on Science and Technology for Development,

Concerned at the continued inadequacy of resources devoted to fostering science and technology for development,

Recalling its resolution 41/183 of 8 December 1986 on the United Nations Financing System for Science and Technology for Development,

Recalling also resolution 5 (IX) of 7 August 1987 of the Intergovernmental Committee on Science and Technology for Development, 4/

Recalling further decision 89/52 of 30 June 1989 of the Governing Council of the United Nations Development Programme, 8/

1. Reaffirms the need for adequate resources on a continuous and assured basis to foster science and technology for development in accordance with the priorities of developing countries;

2. Requests the Secretary-General to explore the possibility of organizing a more effective coalition of resources within the United Nations development system, multilateral financial institutions, regional development banks and bilateral funding agencies to strengthen the endogenous capacity-building of developing countries in science and technology;

8/ See Official Records of the Economic and Social Council, 1989, Supplement No. 13 (E/1989/32), annex I.

3. Stresses the importance of the work of the United Nations Fund for Science and Technology for Development as an identifiable entity with the present size of staff and mode of operation;

4. Requests the Intergovernmental Committee on Science and Technology for Development to continue to provide policy guidance and set priorities for activities of the Fund within the framework of the Vienna Programme of Action;

5. Calls upon the Administrator of the United Nations Development Programme to continue to ensure close and interactive co-operation between the Fund and the Centre for Science and Technology for Development on a programmatic and substantive basis, particularly in implementing decisions emanating from the end-of-the-decade review of the Vienna Programme of Action;

6. Recommends that the Fund, at the request of the interested developing countries, accord priority in support of:

(a) Pilot projects on the endogenous capacity-building of developing countries;

(b) Activities directly related to the follow-up of substantive themes such as new and emerging areas of science and technology considered by the Intergovernmental Committee on Science and Technology for Development;

(c) Projects and programmes aimed at fostering co-operation among developing countries;

7. Emphasizes the important function played by the Fund as the focal point within the United Nations Development Programme for endogenous capacity-building in developing countries and networking with the international science and technology community;

8. Takes note of the decision of the Intergovernmental Committee on Science and Technology for Development to include an item entitled "Financing science and technology for development" in the agenda of its eleventh session and to request the Secretary-General to submit a comprehensive report to it on the question. 9/

E

Assessment of technology

The General Assembly,

Recalling decision 7 (V) of 20 June 1983 10/ and resolution 4 (VIII) of 6 June 1986 3/ of the Intergovernmental Committee on Science and Technology for Development, in which the Committee established the Advance Technology Alert System and called for a review of the project,

9/ See decision 2 (X), para. 5, below.

10/ See Official Records of the General Assembly, Thirty-eighth Session, Supplement No. 37 (A/38/37), annex, sect. B.

Taking note with appreciation of the report of the Secretary-General on the evaluation by the international group of experts of the Advance Technology Alert System, 11/

Recognizing that, because of the complexity and the global implications of new and emerging areas of science and technology, careful assessment of technology is required to take full advantage of such emerging technologies and to avoid negative repercussions thereof for developing countries,

1. Resolves that, in pursuance of the substantive theme approach, the Intergovernmental Committee on Science and Technology for Development shall choose subjects of particular significance with major science and technology dimensions with a view to providing an assessment of technology and related policy analysis in order to facilitate the debate of the question in the General Assembly;

2. Decides:

(a) To continue and to improve further the Advance Technology Alert System as an important and effective means of applying technology assessment to endogenous capacity-building in developing countries;

(b) To continue also to publish the ATAS Bulletin within existing resources, focusing on the risks and benefits of new and emerging technology to development, especially in developing countries, and on diverse practices of technological assessment being used by Member States and international organizations;

(c) To entrust the Centre for Science and Technology for Development, through the Advance Technology Alert System and in co-operation with other United Nations bodies, to serve as the focal point for technological assessment within the United Nations system and, where possible, for relations with Governments and non-governmental organizations concerning technological assessment activities in Member States;

3. Takes note of the decision of the Intergovernmental Committee on Science and Technology for Development to choose as the substantive theme for its eleventh session, "Ways and means of ensuring the participation of developing countries in international co-operation for research on and development of environmentally sound technologies, and the rapid and effective transfer of such technologies to those countries"; 12/

4. Requests the Centre for Science and Technology for Development to study ways and means of assisting developing countries in enhancing their capacity to assess new technologies, and recommends that a study be undertaken regarding new materials and the processing of raw materials, making use of the

11/ A/CN.11/90.

12/ See sect. V.E below.

results of the Centre's ongoing programme on materials technology, and requests the Secretary-General to report thereon to the Intergovernmental Committee at its eleventh session.

102nd meeting
1 September 1989

- 2 (X) Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development

The Intergovernmental Committee on Science and Technology for Development,

Reaffirming the need to strengthen the role of the Centre for Science and Technology for Development,

Bearing in mind its recommendation to the General Assembly on the end-of-decade review of the Vienna Programme of Action on Science and Technology for Development and its revitalization, 13/

Having considered the report of the Secretary-General on the activities of the Centre for Science and Technology for Development and of the United Nations Fund for Science and Technology for Development, 14/

Expressing its appreciation for the report of the Advisory Committee on Science and Technology for Development on its eighth session, 15/

Taking note with appreciation of the report of the Secretary-General on the evaluation by the international group of experts of the Advance Technology Alert System, 16/

Welcoming with appreciation the declaration entitled "Science, Technology and Development: the Imperative of Social Innovation", 17/ prepared by current and former members of the Advisory Committee on Science and Technology for Development, on the occasion of the tenth anniversary of the Vienna Programme of Action on Science and Technology for Development,

13/ See resolution I (X), sect. A above.

14/ A/CN.11/88.

15/ A/CN.11/91 and Add.1/Rev.1.

16/ A/CN.11/90.

17/ A/CN.11/91/Add.1/Rev.1, annex.

Recalling its resolution 2 (IX) of 7 August 1987, 18/

Having considered the draft programme in science and technology of the United Nations medium-term plan for the period 1992-1997, 19/

1. Invites the Advisory Committee on Science and Technology for Development to hold sessions, to the extent possible, in developing countries, in order, inter alia, to provide opportunities for interaction between the national science and technology communities of those countries and the members of the Advisory Committee;

2. Encourages the Advisory Committee to provide a substantive contribution to the Ad Hoc Committee of the Whole for the Preparation of the International Development Strategy for the Fourth United Nations Development Decade;

3. Decides to choose as its substantive theme for its eleventh session "Ways and means of ensuring the participation of developing countries in international co-operation for research on and development of environmentally sound technologies, and the rapid and effective transfer of such technologies to those countries", 12/ and requests the Centre for Science and Technology for Development to prepare a comprehensive and analytical report, in consultation with the relevant bodies of the United Nations system, for that purpose;

4. Also decides that the Centre for Science and Technology for Development, in co-operation with organizations and programmes of the United Nations system concerned, including the United Nations Fund for Science and Technology for Development, should:

(a) Continue the pilot studies on building endogenous capacities;

(b) Where appropriate, employ subregional approaches to endogenous capacity-building in the area of science and technology;

(c) Examine the possibilities of co-ordinating the efforts of the specialized agencies and the donor countries to improve the infrastructures of the universities and institutions of higher learning in the field of science and technology in developing countries, particularly in Africa, as an indispensable element in building endogenous capacity of the region;

5. Further decides to include an item entitled "Financing science and technology for development" in the agenda of its eleventh session and to request the Secretary-General to submit a comprehensive report to it on the question; 9/

18/ Official Records of the General Assembly, Forty-second Session, Supplement No. 37 (A/42/37), chap. II, sect. A.

19/ A/CN.11/1989/CRP.2.

6. Further decides to include an item entitled "Assessment of the impact of the activities of the United Nations system in promoting endogenous capacity-building in developing countries in the field of science and technology" 12/ in the agenda of its eleventh session, and requests the Centre for Science and Technology for Development to prepare, in consultation with Member States, an analytical report on the contribution of the United Nations system to endogenous capacity-building, taking into account ongoing and planned pilot projects on endogenous capacity-building, inter-agency missions and other activities of the Centre;

7. Requests the Centre for Science and Technology for Development, in co-operation with other relevant organs, bodies and organizations of the United Nations system and relevant organizations in the developing countries, to submit a report to the Intergovernmental Committee at its eleventh session, with inputs from the Advisory Committee on Science and Technology for Development, on the available scientific methodologies for the planning and management of science and technology policy to promote the development of science and technology in developing countries;

8. Also requests the Centre to enhance its efforts to promote science and technology for development in the least developed countries, especially in the context of endogenous capacity-building, and to submit concrete proposals through the Preparatory Committee to the Second United Nations Conference on the Least Developed Countries, for possible inclusion in a new substantial programme of action for those countries;

9. Further requests the Secretary-General to assist developing countries in their efforts to involve women fully as participants, as well as beneficiaries in activities in the field of science and technology, including technology assessment, the recommended pilot projects and the proposed national dialogues, and further requests the Secretary-General to include in his report on the activities of the Centre to the Intergovernmental Committee at its eleventh session a section on the progress made in the involvement of women in the various subject areas;

10. Approves the draft programme in science and technology of the United Nations medium-term plan for the period 1992-1997 in the light of the end-of-decade review of the Vienna Programme of Action on Science and Technology for Development by the Intergovernmental Committee.

102nd meeting
1 September 1989

B. Decision

1 (X) Frequency of future sessions of the Committee

The Intergovernmental Committee on Science and Technology for Development, in pursuance of a decision taken at its ninth session to review the frequency of its meetings, decides to continue, for the time being, holding its sessions on a biennial basis.

III. ORGANIZATIONAL MATTERS

A. Opening and duration of the session

4. The tenth session of the Intergovernmental Committee on Science and Technology for Development was held at United Nations Headquarters from 21 August to 1 September 1989.

5. The Committee held 12 meetings (91st to 102nd); as well as a number of informal meetings.

B. Membership and attendance

6. In accordance with the provisions of General Assembly resolution 34/218, the Committee is open to the participation of all States as full members. Representatives of the following States attended the tenth session of the Committee:

Afghanistan	Greece	Norway
Algeria	Guatemala	Pakistan
Antigua and Barbuda	Guyana	Peru
Argentina	Haiti	Philippines
Austria	Holy See	Poland
Bangladesh	Hungary	Republic of Korea
Barbados	India	Romania
Belgium	Indonesia	Saint Lucia
Bolivia	Iran (Islamic Republic of)	Saudi Arabia
Brazil	Iraq	Senegal
Bulgaria	Ireland	Sri Lanka
Byelorussian Soviet Socialist Republic	Israel	Suriname
Canada	Italy	Sweden
Cape Verde	Jamaica	Switzerland
China	Japan	Thailand
Colombia	Jordan	Trinidad and Tobago
Costa Rica	Kenya	Tunisia
Cuba	Lao People's Democratic Republic	Turkey
Denmark	Lebanon	Uganda
Ecuador	Lesotho	Ukrainian Soviet Socialist Republic
Egypt	Malaysia	Union of Soviet Socialist Republics
Finland	Mauritania	United States of America
France	Mexico	Uruguay
German Democratic Republic	Mongolia	Vanuatu
Germany, Federal Republic of	Mozambique	Venezuela
Ghana	Netherlands	Viet Nam
	Nigeria	Yugoslavia

7. The following United Nations organizations and bodies were represented:
- Department of Political and Security Council Affairs, Outer Space Division
 - United Nations Conference on Trade and Development
 - United Nations Environment Programme
 - United Nations Institute for Training and Research
 - United Nations University
 - Economic Commission for Africa
 - Economic Commission for Latin America and the Caribbean
 - United Nations Centre for Human Settlements
 - United Nations Fund for Science and Technology for Development
 - United Nations Population Fund
8. The following specialized agencies were represented:
- International Labour Organisation
 - Food and Agriculture Organization of the United Nations
 - United Nations Educational, Scientific and Cultural Organization
 - World Health Organization
 - World Bank
 - United Nations Industrial Development Organization
9. The following intergovernmental organizations were represented:
- Asian-African Legal Consultative Committee
 - Commission of the European Communities to the United Nations
 - Latin American Economic System
 - Inter-American Development Bank
 - Organization of American States
 - Intergovernmental Committee for Migration
10. The following non-governmental organizations were represented:
- Carnegie Corporation of New York
 - Consejo Europeo de Investigaciones Sociales Sobre America Latina (CEISAL)
 - International Chamber of Commerce
 - International Council of Women
 - Latin American Association for Scientific and Technological Policy (ALPCYP)

C. Election of officers

11. At its 91st meeting, on 21 August 1989, the Committee elected by acclamation the following officers for its tenth session:

Chairman: Celso LAFER (Brazil)

Vice-Chairman: Oleg N. PASHKEVICH (Byelorussian Soviet Socialist Republic)
Torsten WESTLUND (Sweden)
ZHU Lilan (China)

Rapporteur: James M. MUGUME (Uganda)

D. Documentation

12. The Committee had before it the following documents:

(a) Provisional agenda (A/CN.11/87);

(b) Report of the Secretary-General on the activities of the Centre for Science and Technology for Development and of the United Nations Fund for Science and Technology for Development (A/CN.11/88);

(c) Report of the Secretary-General on the end-of-decade review of the implementation of the Vienna Programme of Action (A/CN.11/89);

(d) Report of the Secretary-General on the evaluation of the advance technology alert system (ATAS) (A/CN.11/90);

(e) Report of the Advisory Committee on Science and Technology for Development on its eighth session (A/CN.11/91 and Add.1/Rev.1);

(f) Note by the Secretary-General on the appointment of members of the Advisory Committee on Science and Technology for Development (A/CN.11/92);

(g) Background paper entitled "State of science and technology for development: options for the future" (A/CN.11/1989/CRP.1);

(h) Note by the Secretariat on the draft programme on science and technology for development in the medium-term plan for the period 1992-1997 (A/CN.11/1989/CRP.2);

(i) Note by the Secretary-General on the registry of national focal points for science and technology for development (A/CN.11/1989/CRP.3).

E. Adoption of the agenda

13. At its 91st meeting, the Committee adopted the following agenda for the session (A/CN.11/87):

1. Election of officers.
2. Adoption of the agenda and other organizational matters.
3. Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development.
4. Substantive theme: End-of-decade review of the implementation of the Vienna Programme of Action.
5. Programme questions:
 - (a) Programme performance for the biennium 1986-1987;
 - (b) Medium-term plan for the period 1992-1997;
 - (c) Review of recurrent documents and publications.
6. Other matters:
 - (a) Appointment of members of the Advisory Committee on Science and Technology for Development;
 - (b) Frequency of future sessions of the Committee.
7. Election of Chairman and nomination of other officers for the eleventh session of the Committee.
8. Provisional agenda and organization of work for the eleventh session of the Committee.
9. Adoption of the report of the Committee.

F. Adoption of the report

14. At its 102nd meeting, on 1 September, the Committee adopted its draft report (A/CN.11/L.131 and Add.1-4) and authorized the Rapporteur to finalize it in consultation with other members of the Bureau.

IV. WORK OF THE COMMITTEE AT ITS TENTH SESSION

A. Introductory and general statements

15. The Chairman of the tenth session of the Intergovernmental Committee on Science and Technology for Development stated that the end-of-decade review of the implementation of the Vienna Programme of Action provided an opportunity for the Committee to reflect on the significance of science and technology for development and to assess both the positive and negative impacts of scientific and technological advances on the world. Notwithstanding the striking achievements of science and technology in the current decade, low standards of living still persisted in vast areas of the world, seriously undermining their development potential. The situation could only be reversed through the full achievement of the goals of the Vienna Programme of Action. The current session provided the Committee with an opportunity to devise the ways and means to implement those goals and to enhance the role of the United Nations in the promotion of scientific and technological development.

16. The Director-General for Development and International Economic Co-operation noted that it was the tenth anniversary of the Vienna Programme of Action. He stated that, at the national and international levels, its objectives, in spite of some progress, remained unfulfilled. He stated that the Committee should identify the efforts that had led to positive results and define new ways to realize the goals of the Programme of Action, particularly those aimed at strengthening endogenous scientific and technological capacities in developing countries. Measures were also required to reorient scientific and technological activities towards the satisfaction of basic needs, strengthen small and medium-sized enterprises, combat environmental deterioration and achieve sustainable development.

17. The Director-General referred to the role of the General Assembly in addressing scientific and technological questions related to social, economic and political progress. He stated that science and technology must receive due consideration at the special session of the General Assembly on international economic co-operation and in the preparation of an international development strategy for the 1990s.

18. The Chairman of the ACC Task force on Science and Technology for Development reviewed the work of the Task Force during the past decade. In its initial years, it contributed to the formulation of the operational plan for the implementation of the Vienna Programme of Action and to the review of the basic efficiency of the United Nations system in science and technology for development. Recently, it had initiated a major project designed to make the basic thrust of the Programme operational through endogenous capacity-building. It had decided to undertake relevant pilot projects in a few selected developing countries. It had also taken a major initiative in co-ordination at the country level and had fielded the first inter-agency mission to assess the impact of the activities of the United Nations system as a whole in Thailand. Similar projects were being launched in Jordan and Nepal. ACC had recently adopted a decision designed to improve coherence in the United Nations system in the field of science and technology for development. It was to be hoped that the delivery within the United Nations system of assistance in science and technology would be better co-ordinated at a result.

19. The head of the Special Secretariat for Science and Technology of Brazil said that societies that did not have an adequate scientific and technological system ran the risk of becoming irrevocably backward. Endogenous capacity, defined as the local ability to exercise independent, informed judgement regarding the generation, acquisition and deployment of technology for economic and social development, was the first stage in the process of building scientific and technological maturity. Also needed were funding mechanisms, adequate interaction between universities and industry and between universities and research institutions, and the creation of research and development centres. The Government must lay down a national science and technology policy on the desired economic, social and cultural objectives.

20. The Minister of State for Science and Technology of Venezuela said that, although the Vienna Programme of Action had largely failed to meet its goals, the international community had achieved important scientific advances in areas critical for development. The failure to implement the Programme could be attributed chiefly to the unfavourable evolution of the world economy during the 1980s, the lack of genuine political will to support the science of technology sector in developing countries, and the lack of a real understanding in developing countries of the importance of science and technology as engines of economic and social growth.

21. The Minister proposed that the future orientation of the work of the Intergovernmental Committee should be based on the need (a) to create incentives for national policies that promoted the geographical decentralization of science and technology management and the participation of the production sector; (b) to develop regional co-operation and joint undertakings to deal with common problems; (c) to foster international co-operation to strengthen science and technology infrastructures and develop human resources at the highest level; (d) to make international policy efforts in science and technology compatible with those in the field of industry and in foreign trade.

22. The Rector of the United Nations University stated that the University had been promoting endogenous capacity-building since its inception. The Vienna Programme of Action had clearly created a greater awareness of that important approach. Since its inception, the United Nations University has been promoting the concept and practice of endogenous capacity-building in the area of science and technology for development and that is reflected in its programmes of research, training and dissemination of knowledge, and in the establishment of its research and training centres and programmes. The United Nations University and the United Nations Centre for Science and Technology for Development have continued to work closely over the years in the implementation of the Vienna Programme of Action and are now in the process of undertaking the necessary preparations for the establishment of a register of research in the United Nations system.

B. Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development

(agenda item 3)

23. The Executive Director of the United Nations Centre for Science and Technology for Development introduced the agenda item and the related documents prepared by the Secretary-General. He stated that, for the first time, pursuant to the request of the Committee, several intergovernmental bodies of the United Nations system had considered the report of the Secretary-General on policy guidelines for the harmonization of activities of the organizations of the United Nations system in science and technology for development (A/CN.11/84). The Secretary-General proposed a set of policy guidelines that could serve as points of reference for the United Nations system in the field of science and technology. During the past three years, the Centre and the ACC Task Force had brought about a new approach to co-ordination in science and technology and had imparted new dynamism and a sharper focus.

24. Concerning co-operation between the Centre and the United Nations Fund for Science and Technology for Development, the report of the Secretary-General on the activities of the Centre (A/CN.11/88) included a section dealing with that dimension, which had been prepared jointly by the Centre and the Fund. Resolution 5 (IX) on policy guidance and activities of the Fund, adopted by the Intergovernmental Committee at its ninth session, for the first time provided clear guidelines for the use of the Fund's resources, which were to be reviewed at the present session. Future utilization of those resources should be more closely linked to the decisions of the Intergovernmental Committee and with the activities of the Centre, which must be more fully integrated with the activities of the Fund. The time had also come to explore other modalities, such as a coalition of resources that could include all donors, bilateral as well as multilateral, interested in supporting science and technology in developing countries.

25. The Executive Director reviewed the activities of the Centre during the past two years and mentioned, in particular, the national policy dialogues on endogenous capacity that were currently being undertaken in Jordan, Nepal, Thailand and the United Republic of Tanzania; a seminar on capacity-building in small and medium-sized enterprises, held in China; a proposed seminar on drought and desertification; the Advanced Technology Alert System (ATAS); climate and development; science and technology information; the provision of science and technology literature in the Portuguese language for the Lusophone countries; and a directory of national and regional information sources. The Centre had also made considerable efforts to communicate more efficiently and effectively with Member States, and the quarterly Update newsletter had been considerably improved.

26. The Chairman of the Advisory Committee on Science and Technology for Development introduced the report of the eighth session. He stated that the experience of a series of unanticipated events in the 1980s called for the need to develop adaptive capabilities for science and technology for development. The Vienna Programme of Action had stood the test of time remarkably well against the

difficult social and economic landscape. The three basic principles of the Programme of Action were still relevant; however, its implementation had had mixed results. The experience in Europe in the last decade had shown that, given political will and commitment, the effect could be remarkable. Over time, the nature and content of the Advisory Committee's work had evolved substantively. Future work would also focus on how to harness international collaboration or national strategies for international co-operation.

27. The Chairman of the Advisory Committee also announced the issue of a declaration by present and past members of the Advisory Committee on the occasion of the tenth anniversary of the adoption of the Vienna Programme of Action. The declaration highlighted the fundamental paradoxes that existed today and called for social and institutional innovation to match the present enhanced scientific and technological capabilities at the global level. Instead of imposed solutions or visions, tolerance for cultural and religious diversities, respect for human rights, active encouragement of individual freedom and creativity and sensitivity to the effects of equality of knowledge and power were essential in the view of the Advisory Committee for linking science and technology to the preservation and advancement of humanity.

28. The representative of Malaysia, speaking on behalf of the States members of the Group of 77, stated that the developing countries fully supported the activities of the United Nations Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development, which had indeed made important contributions to the development of developing countries. They also recognized the vital role that the United Nations system as a whole could play in the field of science and technology for development. In order to maximize its potential in that area, harmonization and co-ordination of its science and technology efforts needed to be emphasized. The Group of 77 would wish to ensure that this good work is continued. Developing countries have serious concerns, however, regarding the future of the United Nations Fund for Science and Technology for Development. It has made significant contributions in helping many countries improve their technological information systems and technological innovation activities. Moreover, many developing countries have made pledges every year to the Fund to the best of their ability. Regrettably, the response from most industrialized countries has been very disappointing.

29. The following further points were made by the representatives of several countries on the activities of the United Nations system. The policy guidelines for harmonization of the activities of the United Nations system proposed in the report of the Secretary-General (see A/CN.11/88) were supported. Undue concern regarding the overlap or duplication of professional responsibilities should not be allowed to hinder the United Nations role in promoting science and technology for development. Organizations of the United Nations system should provide enhanced support to the process of building endogenous capacities of developing countries in science and technology, including the capacity for technological assessment. Although there are many United Nations bodies dealing with different aspects of science and technology in the developing world, the United Nations system had yet to co-ordinate fully its activities at the national level. More effective and efficient co-ordination at the local level was vitally needed. The International Monetary Fund (IMF) and other multilateral funding agencies, though deeply concerned with fiscal and financial management, should also accept the need for

scientific and technological capability-building in developing countries which would assist in solving survival issues such as health and food. The involvement of the ACC Task Force on Science and Technology for Development in the pilot studies on capacity-building and the impact studies at the country level was viewed as a valuable contribution to the process of harmonization and co-ordination of science and technology in the United Nations system. There was, however, room for enhanced co-operation between the organizations of the United Nations system so as to optimize their combined resources for the benefit of the developing countries. Since the basic premise of the Vienna Programme of Action was that the primary responsibility for development rested on the developing countries themselves, the role of the United Nations system should primarily be an advisory one. The proposal that each of the organizations and agencies of the United Nations system should include one or more major programmes for science and technology was supported.

30. Representatives of several countries extended their support to the Centre for Science and Technology for Development. They also supported the recent emphasis on endogenous capacity-building in developing countries and harmonization and co-ordination of the activities of the United Nations system at the country level. The pilot studies on endogenous capacity-building had proved valuable to the countries in which they were undertaken and should be extended to other developing countries, particularly the least developed and the African countries. The Centre should also continue and strengthen its work in the field of women and science and technology. It should retain its organizational autonomy within the United Nations Secretariat under the direct guidance of the Director-General for Development and International Economic Co-operation.

31. The activities of the Centre should be guided by the need to make the application of benefits from science and technology usable, adaptable and accessible to the development needs of developing countries. High-end technologies were welcome and indeed desirable to developing countries, but they should not be at the expense of traditional technologies.

32. Given the limited financial and personnel resources at the disposal of the Centre, as well as the need for greater clarity, selectivity and focus, the Centre's assistance in endogenous capacity-building should primarily be focused on the policy-making process. Consideration might also be given to extending such assistance to the subregional level. Furthermore, such assistance might also be focused on such specific areas of science and technology as agro-industry, food-processing and mining. The Centre, together with United Nations agencies and other donors, could also examine the possibilities for joint efforts in the rehabilitation of universities in many parts of Africa that were in a state of crisis. It should also examine the development banks and assess the potential for an improved technology transfer process.

33. Since the last session of the Committee, the activities of the Centre had principally focused on the central element of the Vienna Programme of Action, namely, the building of endogenous capacity in developing countries at the national level. The pilot projects being undertaken by the Centre on endogenous capacity-building deserved the full support of Member States, and one representative stated that his country had made a financial contribution for a project in Thailand. A representative of another country said that his Government was prepared to support that effort by a sizeable contribution to a trust fund,

which should enable the initiation of national dialogues in several countries. While the proposed focus for the Centre's future activities, as indicated in the report of the Secretary-General, could be supported, more emphasis should be placed on endogenous capacity-building and harmonization of the United Nations system's activities. For the Centre to successfully carry out its tasks pertaining to the Vienna Programme of Action, full co-ordination and harmonization of activities among all the agencies would be crucial. For that reason, the role of the ACC Task Force on Science and Technology for Development should be further strengthened.

34. The Centre's new approach, which consisted in co-ordinating the science and technology contributions of the United Nations system at the country level, also deserved to be fully supported. Such an effort should not be pursued, however, at the expense of overall harmonization and co-ordination of the activities of the United Nations in science and technology. The Centre should serve as a co-ordinating and harmonizing focal point for United Nations activities in general. It should prepare an overall report on the science and technology activities of United Nations organizations for future meetings of the Intergovernmental Committee, which could be accompanied by suggestions for organizational change, where appropriate.

35. One representative of a developing country said that the Centre's work covered too broad a field and should be reduced in scope. He suggested that more in-depth work should be done in fewer thematic, intersectoral and interdisciplinary subjects. The approach of the inter-agency missions, as suggested in the report of the Secretary-General, would not be useful. Harmonization of programmes had to be undertaken in the first instance, and the authority of the resident representative of UNDP needed to be reinforced for co-ordination at the country level.

36. While the Centre could become the focal point for technology assessment within the United Nations system, as suggested by the review panel of experts (A/CN.11/90), building of a large assessment capacity within the Centre should be carefully examined, with due regard to the need for concentration of the Centre's resources. Other representatives desired further clarification, particularly in relation to relative priorities, while still others felt that the proposed activity should not constitute an expansion of the mandate of the Centre for Science and Technology for Development.

37. Several representatives supported the proposal that the Committee could play an important role in assisting the General Assembly and endorsed the proposal that the Committee should produce technology assessment reports on selected topics under consideration by the General Assembly. Some representatives sounded a note of caution and asked for more information.

38. Many representatives acknowledged with appreciation the work of the Advisory Committee and noted that its role should become increasingly more important in the future. The Committee should provide expert advice not only to the Intergovernmental Committee, but also to the United Nations system as a whole. The Advisory Committee had been able to produce inputs of high professional value. At a time when the Intergovernmental Committee was meeting once every two years, the importance of the Advisory Committee was even greater. The Advisory Committee should be asked to identify issues or matters in which future United Nations involvement should be given high priority and to give feedback to the Centre regarding its activities.

39. Representatives commended the Advisory Committee on the report of its eighth session. They supported the idea of holding future sessions of the Advisory Committee in developing countries as a measure to enable fuller participation of the developing countries in its work.

40. The Executive Director of the Centre for Science and Technology for Development stated that holding the sessions of the Committee outside New York was less expensive and provided an opportunity for linking national experiences and for interaction with the scientific community and the policy makers of those countries. The Committee might therefore suggest flexibility of venue for future sessions of the Advisory Committee. He also mentioned that the number of women in the new membership of the Advisory Committee now constituted 24 per cent of the total, an important step in assuring that women played their full part in science and technology for development.

41. Many representatives referred to new and emerging technologies and the Advanced Technology Alert System of the Centre. New and emerging technologies could enhance prospects for growth and for the social and economic progress of developing countries, and could alleviate poverty and increase the welfare of society. However, they could also render the existing order obsolete and make existing policies and control mechanisms ineffective within a short span of time. The benefits of new technologies were not distributed evenly among all countries. Consequently, their implications to developing countries would not necessarily be the same as for developed countries. The emergence of new structural materials were likely to have adverse effects on the existing production relations and the foreign exchange capacity of primary commodity-exporting developing countries. World-wide co-operation in science and technology should take account of the interests and problems of all countries.

42. As regards ATAS, many representatives appreciated the work of the Centre in that area and considered it to be of particular relevance to the promotion of endogenous capacity-building. ATAS was a valuable and viable tool for international co-operation in science and technology as it specifically attempts to assist developing countries in carrying out technology assessments. The social component of ATAS should receive more attention in international co-operative efforts.

43. One representative from a developed country stated that the professional level of the ATAS Bulletin was not of a sufficiently high quality, and that it should be of a more scientific nature and be transformed into a journal that would address science and technology in the context of global problems. Ways and means should be found for disseminating the results of ATAS, and the Department of Public Information of the United Nations Secretariat might be able to assist in that exercise. The actual use made of ATAS Bulletins by its subscribers needed to be evaluated. It was also suggested that one important topic for ATAS could be the ethical and legal questions surrounding new and emerging technologies, such as biotechnology and genetic engineering. It was also proposed that a new subject, science and technology and the global problems of development, be included in ATAS Bulletins.

44. The Executive Director of the Centre pointed out that ATAS was a process which required a particular cluster of technologies that could have an impact on the

socio-economic life of countries. He invited bodies of experts, both within and outside the United Nations system, to contribute their views, not only on state-of-the-art technologies and plans, but also, more importantly, on their impact on development. ATAS filled a gap not met by scientific literature.

45. The Committee reviewed the work of the United Nations Fund for Science and Technology for Development and its future, based on the joint report of the United Nations Centre for Science and Technology for Development and the United Nations Fund for Science and Technology for Development (see A/CN.11/88, subsects. F and G). The Director of the United Nations Fund for Science and Technology for Development stated that the Administrator of the United Nations Development Programme was fully cognizant of the vital role played by the Intergovernmental Committee in providing policy guidance and priorities. In the UNDP Governing Council, the Administrator had been requested to explore ways to strengthen the Fund's activities, taking into account the continuing responsibility of the Intergovernmental Committee, and to submit a report on that issue in 1990. Clearly, strengthening the Fund would require improving its financial base, and the Intergovernmental Committee should provide guidance on that important matter. In spite of severe resource constraints, new flexible procedures had been developed, and with committed staff and new arrangements, the Fund had been able to respond promptly and effectively to emerging needs. Of \$US 10 million pledged, only about \$US 1 million in core funds were made available. Roughly one half had been contributed by some 38 developing countries, and the other half by a small number of industrialized countries.

46. Many representatives welcomed the joint report of the Centre and the Fund and, in particular, the new close working relationship between them, especially in such programme matters as endogenous capacity-building. It was considered essential that the Centre and the Fund work in the closest possible manner in the future so that each could support the other's mandates and functions. The resources of the Fund should be increasingly focused on endogenous capacity-building and in support of the decisions of the Intergovernmental Committee. The tangible achievements of the Fund, in spite of extremely limited resources, were praiseworthy. The continuation of the Fund as a separate entity was strongly supported.

47. The representative of Norway, speaking on behalf of the Nordic countries, stated that, in spite of the vigorous support by Nordic countries, the United Nations Fund for Science and Technology for Development had not become viable and the continued existence of the Fund could rightly be put into question. A minimum requirement for continuance of the Fund was a much wider participation by contributing countries. Despite its limited resources, the Fund had been able to provide assistance to a number of developing countries and to promote science and technology within UNDP.

48. Several representatives supported the idea of assembling resources drawn from a coalition of multilateral financial institutions, regional development banks and bilateral funding agencies to support science and technology in general and endogenous capacity-building in particular. The Centre and the Fund could play a central role in such a coalition. With an improved international political climate and reduced security outlays, the future might be more promising than the past. Reference was also made to the possible release of resources from nuclear and general disarmament, which could open possibilities for greater co-operation in science and technology.

49. A representative of the Food and Agriculture Organization of the United Nations (FAO) informed the Committee of the internal steps taken by that organization to ensure the efficient follow-up of the recommendations of the Vienna Programme of Action. FAO intended to participate in both of the forthcoming inter-agency missions to Nepal and Jordan which could help countries take steps leading towards a consensus on the demand for science and technology.

50. The Executive Director of the United Nations Centre for Science and Technology for Development, while clarifying some of the points made during the debate, recalled the elaborate process of reviewing the Vienna Programme of Action that the Centre had undertaken. Concerning harmonization at the country level and inter-agency missions, those activities were being conducted in the same countries in which the pilot studies on endogenous capacity-building were being held so as to optimize resources.

51. The two-track approach consisted in looking at a country from two different perspectives: one from within through national policy dialogues and the other, again from within, but from the perspective of the United Nations system as a whole. The crucial link in both of those exercises was a UNDP resident representative/resident co-ordinator. The recent decision of the Administrative Committee on Co-ordination endorsing, at the highest executive level of the United Nations system, the three core ideas presented in the report of the Secretary-General on the Centre's activities, could be expected to impart greater momentum and coherence to the delivery and relevance to the work of the United Nations system as a whole.

C. Substantive theme: end-of-decade review of the implementation of the Vienna Programme of Action

(agenda item 4)

52. The Executive Director of the Centre for Science and Technology for Development introduced the report of the Secretary-General on the end-of-decade review of the implementation of the Vienna Programme of Action (A/CN.11/89) and the background paper entitled "Study of science and technology for development in the world: options for the future" (A/CN.11/1989/CRP.1).

53. He stated that the documentation for the theme of the session was based on extensive consultations with countries and organizations within and outside the United Nations system. Peace, stability and equality among countries would depend considerably on endogenous capacity and improved international relations in science and technology. The Committee would be challenged to assert itself as a global forum with a global vision for resolving possible conflicts and promoting endogenous capacity-building in all countries. The earlier decision of the Committee to focus its energies on global substantive themes needed to be taken to its next logical step - that of connecting substantive themes with the mainstream of the work of the General Assembly by combining the theme approach with the technology alert methodology of the ATAS programme in relation to selected agenda items of the General Assembly, such as the issue of the protection of global climate. Since the debate in the Assembly did not currently benefit from independent assessments of the scientific and technological implications of those topics, many delegations were placed at a disadvantage. The Committee was the only forum in which scientific and technological policy issues and options could be

examined as issues of current concern, such as the environment, climate, global warming, chlorofluorocarbon and ozone layer disruptions, and natural disasters. While the global function of the Committee must be theme-specific, the process of translating global and general conclusions into national and regional contexts must involve all the stakeholders in the development process. The pilot programme of endogenous capacity-building currently being implemented by the Centre initially had strong positive results. It was hoped that, with additional extrabudgetary support, it could be extended.

54. Preparations for the end-of-decade review revealed that the Committee could best discharge its mandate in the field of co-ordination and harmonization on a thematic basis and at the country level. The early results of the inter-agency missions to assess the impact of the activities of the United Nations system had been promising. The implementation of the decisions of the Committee and the prioritized initiatives agreed at the national level, as well as the conduct and follow-up to the inter-agency missions, required fresh thinking and new ideas based on a coalition of human, material and financial resources drawn from bilateral, multilateral and non-governmental sources. The Committee should also make a contribution to the special session of the General Assembly on revitalizing economic development and the formulation of the next international development strategy.

55. The representative of Malaysia, speaking on behalf of the Group of 77, stated that the review of the implementation of the Vienna Programme of Action was taking place in an era of rapid technological development. Many technological innovations and advances took place in the developed countries, however, and not within the reach of developing countries. Since developing countries had not been able to derive the full benefits of such developments, the scientific and technological gap between the developed and developing countries was widening. Developing countries attached enormous importance to science and technology, which was reflected in their national social and economic planning and policies. They were also aware of the benefits of the application of science and technology for development to developing countries in order to improve the quality and living standards of their people. Despite efforts made by them, significant progress had not been achieved in creating appropriate conditions for the rapid development of science and technology in developing countries or a faster transfer of scientific and technological achievements to developing countries. An international code of conduct for the transfer of technology had not been finalized. International support was essential to complement the efforts of developing countries to accelerate the pace of scientific and technological development and to absorb new technologies, particularly advanced technologies, such as biotechnology and genetic engineering. To other conditionalities, the issue of environment had been added. The root cause of environmental desecration was abject poverty and lack of sustained growth and development. There was an urgent need for the international community to set aside net additional resources for environmental co-operation which should, inter alia, be used to enable access to, and rapid transfer of, environmentally safe technology that should be made available to developing countries on concessional terms.

56. Despite the best efforts of developing countries, the implementation of the Vienna Programme of Action during the past 10 years had not produced satisfactory results, and the response from the industrialized world, particularly in terms of financial contributions, had been very meagre. All developing countries were involved in economic and social processes of development, and no differentiation

should be made among them. The Group of 77 remained committed to the basic goals of the Vienna Programme of Action. The Vienna Programme of Action should lead to the strengthening of the endogenous capacities of developing countries, international scientific and technological co-operation that inspired trust and confidence, full access to scientific and technological knowledge, including new and emerging technologies, unimpeded transfer of technology on non-exploitative terms, a harmonized United Nations policy on science and technology and the setting up of a financial mechanism to provide the necessary resources to ensure meaningful implementation of the Programme of Action. Patent rights, copyrights and intellectual property rights should not stand in the way of development at a time when developing countries urgently needed to revitalize their economic growth and development. The relationship between science and technology and human resources development should not be lost sight of, as was emphasized at the Ministerial Meeting of the Group of 77 held at Caracas in June 1989 (see A/44/361, annex).

57. The work of the Committee would contribute to other United Nations conferences. The improvement in the relations between the super-Powers and the movement towards the solution of several regional conflicts should provide an opportunity to reallocate resources from disarmament to science and technology for peaceful uses, as well as to promote foreign investment in developing countries.

58. Representatives of developing countries noted that the report of the Secretary-General on the end-of-decade review highlighted the various issues and provided a very useful basis for discussion. They commended the Secretary-General on the quality of the document. The current decade had been a period of phenomenal development in science and technology. As developed countries began to move into the information age, the developing countries needed to complete the process of industrialization. The contemporary world no longer had sufficient resources or environmental capacity to permit development through traditional methods. Developing countries realized that economic development must be based on technological progress and science and that technology must be used to promote economic progress through the harnessing of science and technology. The Vienna Programme of Action was the first major global step to attempt to promote a better life for the underprivileged.

59. The very concept of using science and technology to promote development emanated from the Vienna Conference in 1979. At that time there was no concrete empirical evidence and no secure theoretical basis for using science and technology to promote development. The Vienna Programme of Action had led to an awareness of the vital role of science and technology in the development process. But for most developing countries, an improvement in local scientific and technological capability was not in itself enough to overcome the chronic problems of underdevelopment. It needed to be supplemented with restructured international relations, especially as they related to the debt burden, the decline of financial resource flows, trade restrictions and the curtailment of the dissemination of scientific information. Scientific and technological development could not be curtailed by short-term economic and fiscal management or debt servicing.

60. The 10 years since the adoption of the Vienna Programme of Action had provided an opportunity to learn from the lessons of the past and to seek viable and innovative ways to bring science and technology into the mainstream of socio-economic development. Although scientific and technological change and innovations had accelerated at an unprecedented rate, the external economic

environment was inhospitable. Not only was multilateralism in retreat in general, but the Vienna Programme of Action had received disappointingly little support from developed countries.

61. The fulcrum of the Programme - to strengthen the endogenous capacities of developing countries - required the participation of all stakeholders in society. Priority areas should be identified through national policy dialogues involving all constituents and should reflect their demands and interests. The process should serve to direct international co-operation towards greater and more sustainable efforts to build institutions, strengthen human resources, and develop and adapt technology.

62. Endogenous capacity-building in science and technology of developing countries was primarily the responsibility of the developing countries themselves. But it also entailed a spirit of partnership in which technologically disadvantaged countries would be assisted by the industrialized societies and other developing countries. The concept of capacity-building should be a demand-driven process. Developing countries only had a limited capability to undertake policy analysis and technology assessment to reflect their particular situations. Equipment, infrastructure and expertise for isolated projects could not substitute for autonomous decision-making ability to address priority demands. The need to promote the linkages between scientific and technological efforts and socio-economic needs had been overlooked, and national and international efforts to promote endogenous capacity-building had been lacking.

63. Endogenous capacity-building could not take place in a vacuum and access to relevant science and technology was crucial. Drastic revisions in the current approaches to technical co-operation were needed. New opportunities were emerging for the creation of consultative mechanisms for international co-operation through innovative types of arrangements. At the same time, the developed countries had a special responsibility in promoting international co-operation for development, owing to the impact of their macro-economic policies on the international environment.

64. The current international situation included two other issues of great concern to humanity. First was the deterioration of the Earth's environment. Additional financial and technological resources would have to be allocated to slow down the deterioration. The second area of concern was the wide differential between the developed and developing countries, which could give rise to stresses and strains. In order to solve those basic problems, the United Nations will have to learn to act less as a body representing individual nations and more as a forum where issues of concern to humanity at large could be considered.

65. The role of science and technology in overcoming the obstacles to sustainable long-term socio-economic development in developing countries could hardly be overemphasized. Owing to their technological backwardness, many developing countries found themselves at a comparative disadvantage in pursuing their national development goals and in enjoying a growing share of world economic growth. Most were struggling to revitalize their economic growth and development in a world economy that was becoming more competitive. One challenge facing the Committee in reviewing the Vienna Programme of Action was to bring about the redirection, adjustment and mobilization of adequate resources.

66. The existing pattern of international scientific and technological relations needed to be restructured in a way that would promote endogenous capacity-building in developing countries. The migration of qualified and skilled persons from developing to developed countries constituted one of the most critical obstacles in strengthening endogenous capacity-building.

67. It was gratifying that the application of science and technology to the study, prevention, monitoring and combating of natural disasters had received the attention of policy-makers. High priority should be given to disaster preparedness. The protection of the environment was a common obligation, and the emergence of environmentally safe technologies in the developed world was welcome. It would, however, be counter-productive unless the developing countries had preferential access to those technologies on concessional terms.

68. The Intergovernmental Committee on Science and Technology for Development, the Advisory Committee on Science and Technology for Development, the ACC Task Force on Science and Technology for Development, the Centre for Science and Technology for Development, and the United Nations Fund for Science and Technology for Development had promoted a broader participatory system of international co-operation in science and technology for development. There was need for effective harmonization and co-ordination of their activities, however, in order to maximize their impact. There was also need for redefinition of their scope and functions within the framework of the Vienna Programme of Action. The Committee, in order to move with the times, should be given a new role, linking its substantive themes with questions in the agenda of the General Assembly.

69. A major reason for the sluggish implementation of the Vienna Programme of Action and the diminished role of the United Nations system was the lack of adequate funds and the retreat of the industrialized countries from their obligations. A significant increase in contributions to the United Nations Fund for Science and Technology for Development would enable the United Nations system to perform the catalytic role of reorienting the scientific and technological efforts of developing countries in consonance with the development demands of the 1990s.

70. The 42 least developed countries were the weakest partners in the international community and were highly vulnerable to changes in the international economic situation. In those countries, science and technology were often rudimentary. They continued to need more funds from external sources to support their scientific and technological programmes in order to exploit their economic potential. The development co-operation agencies should recognize their special situation, and the Committee should specifically address their special needs in its work programme for the 1990s.

71. In recent years there had been a trend to hinder the access of developing countries to developments in science and technology, which was evident in the positions adopted by some of the industrialized countries in the Uruguay Round of multilateral trade negotiations and in other forums concerned with the protection of intellectual property rights, foreign direct investment and trading services. Just as the pace of scientific and technological advancement had accelerated, the concept of sustainable development had emerged, and concern for the environment had become increasingly important. Environmental protection was clearly a field in which endogenous capacity-building was vital for the developing countries. It was necessary to create mechanisms to ensure the transfer, at cost, to developing

countries of environmentally sound technologies developed in the industrialized world. Such technologies would enable the developing countries to exploit their natural resources more rationally and without inflicting the kind of environmental damage that had occurred during the industrialization of the developed countries. The measures required for the protection of the ozone layer highlighted the degree to which technology, environmental protection and additional financial resources were intertwined.

72. The representative of one developing country proposed that a special agency or authority be created, charged with the responsibility of co-ordinating the struggle against the damage to the Earth's environment and accelerating and stimulating the tempo of economic development in the developing countries without adversely affecting the developed countries. The resources and funds for such an agency could come from the exploitation and development of common resources and new sources of income that are not currently being taxed by national Governments.

73. In the process of mobilizing science and technology for development, strong emphasis needed to be placed on small and medium-scale enterprises.

74. The launching of a new international development strategy for the fourth United Nations development decade and the convening of the special session of the General Assembly devoted to international economic co-operation offered exceptional opportunities for concrete initiatives to give meaning to the principles and objectives agreed upon at the Vienna Conference and provided a unique occasion to integrate the dimension of science and technology into the mainstream of macro-economic policies and management. The Committee and the Centre for Science and Technology for Development should actively participate in those processes and in other forthcoming events such as the Second United Nations Conference on the Least Developed Countries to be held in 1990.

75. A deliberate attempt should be made to interest entrepreneurs and industrialists in investing locally in research and in promoting the production and utilization of technologies. There was also need to establish an appropriate institutional structure to facilitate the flow of scientific and technological information. As regards domestic financing of science and technology, several developing countries had, since the Vienna Conference, significantly increased their resources for science and technology and, while some of them had reached the target of 1 per cent of GDP, many others were still falling far short of that level. There was wide recognition that the private sector should be more closely involved and induced to share a greater burden in financing research and development. A co-ordinated, international approach and increased resources were required to apply science and technology to education, employment, ecology and other economic and social areas.

76. The representative of a developing country commended the Secretary-General for his report on the activities of the United Nations system in so far as it was detailed, frank and self-critical. The work of the Centre reflected the limitations and frustrations involved in carrying out the Vienna Programme of Action: the need to extend scarce resources to cover a broad range of activities within the context of a system of international organizations that frequently pursued their own objectives in specific countries. The resources available had been spent mainly on inter-agency missions, international meetings and internal co-ordination efforts among the organizations of the United Nations system. The representative stated that the task of the Centre needed to be reduced in scope and

that more in-depth work should be done on fewer thematic subjects. As an example, he pointed out the five issues of technical co-operation of particular interest to his country: protection of the environment; biotechnology; new materials; telecommunications and computers; and reduction of extreme poverty. Those areas were intersectoral and interdisciplinary and required new co-ordinated approaches by the United Nations system.

77. Representatives of several developing countries explained in detail their experiences and the problems encountered in the implementation of the Vienna Programme of Action during the past decade and described the scientific and technological situation in their countries.

78. The representative of France, speaking on behalf of the States members of the European Economic Community, stated that the decade had not fulfilled all the hopes it had raised with regard to development, although science and technology continued to advance at an astonishing pace. About half of the countries of the developing world, particularly in Asia, were on the right track, even if they still had a long way to go. For many developing countries, particularly in Africa and Latin America, the decade was a great disappointment. The Vienna Programme of Action did not respond to the economic and social realities that would have helped its implementation. It isolated science and technology too much, and it did not place sufficient emphasis on education and a policy favouring investments. Endogenous capacity depended on education, which was necessary in order to take advantage of science and technology as a primary condition of economic growth. Scientific and technological co-operation should respond in all cases to a concrete demand that should relate to the educational system and to the productive infrastructure. The term "endogenous" needed further clarification and elaboration. The new directions and approaches suggested also needed to be explained in greater detail. The more convincing they were, the firmer the commitments entered into by the countries of the European Economic Community. Such was the meaning of the extreme caution with which they would consider the drafts that would be submitted to them.

79. A representative of Norway, speaking on behalf of the Nordic countries, stated that a major outcome of the Vienna Conference was the fact that technology and science were accorded a more central role in international discussions on economic and social matters. The fact that it had proved impossible to reach a satisfactory solution on the issue of financing had had considerable negative impact on the Committee and its work. While various opinions were held as to whether the Committee was the right forum within the United Nations system to handle matters on science and technology and the very existence of the Committee had sometimes been questioned, any change in organization or ways of implementation should aim at a better use of science and technology for development and a more pronounced role of those matters in the United Nations system.

80. While it had to be conceded that the overall implementation of the Vienna Programme of Action fell far short of its goals, important progress had been made in the development, transfer and application of technologies in many areas, such as agriculture and health. International support for science and technology, bilateral as well as multilateral, could not be expected to play more than a catalytic role. The large number of actors and the limited resources available necessitated continuous efforts towards harmonization and co-ordination of activities and a careful selection of the tasks for which the United Nations system was most suitable. More information was needed concerning the ideas presented in the Secretary-General's report regarding the possible extension of the ATAS programme.

81. Representatives of developed countries commented that it was becoming increasingly clear that development research was one of the most beneficial official development assistance (ODA) investments. Returns on investments in agricultural research, for example, were two or three times greater than those in other agricultural activities. Bilateral and multilateral co-operation outside the United Nations system and the private sector had played important roles in the support of national programmes for the development of science and technology in developing countries. None the less, the United Nations system had a legitimate and necessary role to play as well.

82. Science and technology could not be developed in isolation. Successful technological innovations tended to be generated in a relatively more open system, with built-in incentives for creativity. The basic message of the Vienna Programme of Action was still valid despite the ongoing need for new operational interpretations. The external debt crisis, population growth, the slow rate of economic growth, environmental degradation and the AIDS epidemic were among the socio-economic changes that had impeded the vigorous growth planned for science and technology at the Vienna Conference.

83. More work should be done to understand better the role of technology in the development process. The total involvement of women in all aspects of society, especially in science and technology for development, should be ensured. In considering new approaches for the future, it needed to be borne in mind that developing countries were very diverse and differed from one another geopolitically, socio-economically and culturally. The goals and objectives of the Committee for the 1990s must be properly focused, commensurate with its limited resources. Greater focus should be placed on such key issues as developing endogenous capacities, technology assessment and women in science. Science and technology should become an important element and an integral component of other United Nations development programmes.

84. A conscious reordering of national priorities was needed with a view to paying greater attention to the basic needs of people. In the development of endogenous capacity-building, the role of the private sector should not be overlooked. Priorities should be set not by the scientists, government officials or institutions acting alone, but rather through a dialogue of all sectors of society, including the private sector. Closer links between academic institutions and industry should be fostered. Universities could contribute by reshaping their curricula to meet the needs of industry.

85. The recent initiatives of the Centre in undertaking a series of pilot projects on endogenous capacity-building were commendable. The possibilities should be further explored by the Centre with financial support from interested donor countries. The resident representatives of UNDP and the experts in other organs within the system should fully co-operate with the Centre. The provision to develop inter-agency, multidisciplinary missions for the purpose of impact assessment was a welcome development, as was the emphasis on co-ordination in the United Nations system at the country level. Close co-operation between UNDP, the United Nations Fund for Science and Technology for Development and the Centre was essential.

86. The representative of one developed country stated that his country had recently passed a new law on development co-operation, which among other things, stresses the importance attributed to the implementation of initiatives in the

field of scientific and technological research with a view to the transfer of appropriate technologies to the developing countries. Particular attention was paid not only to education as a strategic sector itself, but, more specifically, to the education and training components in all sectors. Development activities in developing countries should be increasingly co-ordinated, and the United Nations system should play an active role in that respect. The institutional system created as a result of the Vienna Conference would be supported. In that connection, he added that his country had contributed financial and material support to the initiatives within the United Nations system specifically devoted to science and technology for development and aimed at fully involving the scientific communities of the developing countries. Bearing in mind the cost-effectiveness of the future activities of the Centre and the Fund, each could play a useful role in the future in support of the activities of the Intergovernmental Committee and in support of other co-ordination efforts within the United Nations system.

87. A representative of another developed country stated that science and technology, while undoubtedly vital to the development of all countries, was not an isolated separate subject. It needed to be integrated into the development process. Very little had taken place concerning new funds and new mechanisms and, as a result, it would be better to integrate the United Nations Fund for Science and Technology into UNDP. The adoption of a programme of action, per se did not solve international problems. Similarly, the establishment of an intergovernmental committee did not ensure concrete results. The functions of the Committee could be performed by either the Economic and Social Council or by the General Assembly. Alternatively, it could be merged with other committees in the United Nations. The Committee could perhaps meet for a shorter period in the future, once every four or five years.

88. Representatives of the Eastern European socialist countries noted that the most urgent and difficult problem facing mankind was development, and the urgency had not decreased in the past 10 years. Rapid advances in science and technology were pushing developing countries further backwards. Greater international co-operation and co-ordination were required to solve global problems, but a central co-ordinating body did not yet exist. The organization of a global network of laboratories, based on university centres in the developed countries, could provide training centres for the personnel of developing countries. A mechanism for the evaluation of technology was needed in the United Nations, since many problems were the result of imperfect technologies. Energy-saving and clean technologies must be available to the developing countries through endogenous capacity-building. Science and technology should be organically linked with the international development strategy for the fourth United Nations development decade. At its next session, the Committee should consider the subject of science, technology and global problems, and his country was prepared to provide detailed proposals. For the practical realization of the Vienna Programme of Action, the importance of human resources development should be underlined. There was also need to establish an active and dynamic mechanism of technology assessment within the United Nations. It was necessary to give much more attention to developing a scientific concept and programme of fast, practical solutions to ecology, energy, food, demography and other problems. Effective exchange of scientific ideas and scientists among member States would facilitate the utilization of material and human resources.

89. A representative of the United Nations Industrial Development Organization (UNIDO) said that the main impact of his organization's activities was

felt through the transfer of technology and technological information by different means, the sensitization of developing countries to the implications of technical progress, and assistance in the development of local technological capabilities. He outlined the strategy on technology of UNIDO, which took into account the new demands brought about by technological, economic and institutional changes. It also had major promotional programmes, including the International Centre for Genetic Engineering and Biotechnology, the International Centre for Science, the Industrial and Technological Information Bank and a new programme on environmental technology.

90. A representative of the Economic Commission for Africa stated that, although the African Governments were aware of the importance of science and technology for development, they were grappling with immediate problems concerning food, shelter, clothing, transport, health and employment. Inspired by the Vienna Programme of Action, the African countries had formulated their own programme of action called the Lagos Plan of Action (A/S-11/14, annex I). The recently promulgated United Nations Programme of Action for African Economic Recovery and Development, 1986-1990 (General Assembly resolution S-13/2, annex, of 1 June 1986) provided a framework for the revitalization of African economies. There was need for a new definition of science and technology that went beyond research and development. The United Nations should more fully harmonize its own activities in the field of science and technology, in order to make greater use of its limited resources.

91. The representative of the Food and Agriculture Organization of the United Nations (FAO) stated that the work of FAO in science and technology predated the Vienna Programme of Action by more than 20 years. The promotion of research and the application of science and technology to development of necessity took forms most appropriate and efficient for serving the needs of member developing countries. Overall, the work of FAO showed remarkable harmony with the spirit and recommendations of the Vienna Programme of Action. Structural and policy adjustments were made to strengthen the capabilities and work of FAO in support of agricultural science and technology.

92. A representative of the International Labour Organisation stated that, since 1979, the objectives of the ILO technology programme had been guided by the recommendations of the Vienna Programme. Technology was an office-wide activity, cutting across several major ILO programmes. The Vienna Programme was a source of ideas and inspiration for discussions among representatives of Governments, employers and workers in various forums of the ILO, including the recently established Advisory Committee on Technology.

93. A representative of the United Nations Educational, Scientific and Cultural Organization (UNESCO) noted that scientists had long-term concerns which political leaders did not always understand. In preparing for the future, the United Nations system should make more concerted efforts to assist the least developed countries in the use and generation of science and technology. There are great gaps not only between the developed and developing countries, but also between developing countries themselves. Since the Vienna Conference, UNESCO has spent approximately \$500 million on science and technology matters, about half of which had come from the regular budget and the other half from extrabudgetary resources. Environmental problems and human resources development require greater attention than in the past decade.

94. A representative of the United Nations Conference on Trade and Development (UNCTAD) referred to the ongoing work of his organization in the field of science and technology, in particular in such areas as strengthening of the scientific and technological capacities of developing countries and restructuring the existing pattern of international scientific and technological relations.

95. The representative of the Organization of American States (Education and Science) stressed the importance attached by his organization to the role of science and technology in accelerating development in its member States and reviewed the activities carried out by his organization in that respect.

96. The representative of the World Bank stated that the great divide between the technological capabilities of highly industrialized countries and the majority of developing countries had increased during the last two decades. In many of its activities that include a technological element, the Bank had shown concern for innovative efforts. During the past two years, the Bank had received requests from more than a dozen countries in the area of technology development. It could provide an integrated approach, and its greater focus on science and technology contributed to sustainable development and to its work at the sectoral and project levels.

97. The Executive Director of the Centre for Science and Technology for Development, in clarifying some of the points raised during the debate, stated that science and technology required time to take root in developing societies. The debate had brought about a broad consensus of support for the three core ideas that had emerged from the end-of-decade review. They were also endorsed by the Administrative Committee on Co-ordination. Two of the three - namely, national policy dialogues and harmonization and co-ordination - were country- and process-oriented and were carried out mostly with extrabudgetary support. The third, the ATAS programme, was global and theme-oriented and was also conducted primarily with voluntary contributions. Concerning the proposal that the Intergovernmental Committee should assist the General Assembly in making technology assessments, future issues of the ATAS Bulletin would address questions on the agenda of the Assembly that would serve as the Committee's substantive themes. Issues of the ATAS Bulletin would be submitted as documents for consideration by the Assembly. There would be no change in the Committee's mandate; the financial implications would be modest; and the Centre would not be enlarged. The arrangement would also promote co-ordination and harmonization within the United Nations system and stimulate international co-operation in science and technology.

D. Programme questions

(agenda item 5)

98. The Executive Director of the Centre for Science and Technology for Development introduced the agenda item. For its discussion of the item, the Committee had before it the following documentation:

(a) Relevant parts of the report of the Secretary-General on the programme performance of the United Nations for the biennium 1986-1987 (A/43/326 and Corr.1 and A/43/326/Add.1 and Corr.1 and 2);

(b) Relevant parts of the report of the Committee for Programme and Co-ordination on the work of its twenty-eighth session (A/43/16 (Part I));

(c) Note by the Secretary-General on the draft proposed programme on science and technology for development of the medium-term plan for the period 1992-1997 (A/CN.11/1989/CRP.2);

(d) Note by the Secretary-General on the preparation of the medium-term plan for the period 1992-1997 (A/43/329 and Add.1).

The three core ideas of the end-of-decade review of the implementation of the Vienna Programme of Action were reflected in the proposed medium-term plan. The records and publications of the Centre were published in the Update newsletter and the ATAS Bulletins.

99. During the debate, the following points were made by various representatives. The proposed emphasis and approach of the medium-term plan was supported. There is a need for improved co-operation between the Centre and other United Nations organizations, such as UNESCO, the United Nations University (UNU) and the regional commissions. There was also a need to take concrete steps to win the support of the international scientific community. Priorities, specific tasks and expected outputs should be defined more clearly and be related to each other. The proposed programme should not lead to an expansion of the regular budget of the Centre. Among the subprogrammes, subprogramme I concerning policy analysis, research and mobilization of resources for science and technology for development was supported. Another priority would be technology assessment and the Advanced Technology Alert System (ATAS). The decision that the Committee would take on the end-of-decade review of the implementation of the Vienna Programme of Action should be reflected in the next medium-term plan of the Centre, to begin in 1992.

100. The Executive Director of the Centre, in his reply, stated that the end-of-decade review of the implementation of the Vienna Programme of Action and the proposed medium-term plan were consistent with each other. The medium-term plan, in any case, could be further elaborated should the need arise. The proposed emphasis clearly was on policy issues and options, and the Centre did not have the power of actual implementation. The Centre intended to interact actively with non-governmental organizations, such as the International Council of Scientific Unions (ICSU), the Third World Academy of Sciences and the American Association for the Advancement of Sciences. Co-operation with the organizations of the United Nations system would also be actively pursued and, as an example, the Centre and the United Nations University were intending to exchange their personnel. Close co-operation with the regional commissions would be another major thrust in the work of the Centre. The Committee should keep in mind the severely limited resources and staff with which the Centre had to function.

E. Other matters

1. Appointment of members of the Advisory Committee on Science and Technology for Development

(agenda item 6 (a))

101. For its consideration of the item, the Committee had before it a note by the Secretary-General on the appointment of members of the Advisory Committee on Science and Technology for Development (A/CN.11/92).

102. At its 98th meeting, on 25 August, the Committee decided to appoint the following 14 candidates, nominated by the Secretary-General, as members of the Advisory Committee for a three-year term beginning on 1 January 1990:

Carlos R. Abeledo (Argentina), Elisabeth Birman (Hungary), Harvey Brooks (United States of America), Karl E. Ganzhorn, (Federal Republic of Germany), Seeiso Liphuko (Botswana), Joanna Olutunmbi Maduka (Nigeria), Marcos Mares Guia (Brazil), Thomas R. Odhiambo (Kenya), Yash Pal (India), Maria de Lourdes Pintassilgo (Portugal), Yangze Sherpa (Nepal), Mikoto Usui (Japan), Dulce Arnao de Uzcategui (Venezuela), Joséphine Guidy Wandja (Côte d'Ivoire).

2. Frequency of future sessions of the Committee

(agenda item 6 (b))

103. At its 101st meeting, on 31 August, the Committee had before it a draft decision submitted by the Chairman of the Committee on the frequency of future sessions of the Committee (A/CN.11/L.135).

V. ACTION TAKEN BY THE COMMITTEE

A. Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development

Draft resolutions A/CN.11/L.130 and L.133

104. At the 100th meeting, the representative of Malaysia (on behalf of the Group of 77) introduced draft resolution A/CN.11/L.130 entitled "Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee on Science and Technology for Development and the United Nations Fund for Science and Technology for Development". Statements were made by the representatives of France (on behalf of the European Economic Community) and the United States.

105. At the 102nd meeting, draft resolution A/CN.11/L.133 was submitted by the Vice-Chairman of the Committee, Mr. Torsten Westlund (Sweden), on the basis of informal consultations. After oral revisions by the representative of Malaysia (on behalf of the Group of 77), the draft resolution was adopted by consensus (for the text, see section II A, resolution 2 (X) above). Draft resolution A/CN.11/L.130 was subsequently withdrawn by its sponsors.

B. Substantive theme: end-of-decade review of the implementation of the Vienna Programme of Action

Draft resolutions A/CN.11/L.129 and L.134

106. At the 100th meeting, draft resolution A/CN.11/L.129, entitled "End-of-decade review of the implementation of the Vienna Programme of Action", was introduced by the representative of Malaysia (on behalf of the Group of 77). Statements were made by the representatives of France (on behalf of the European Economic Community) and the United States.

107. At the 102nd meeting, draft resolution A/CN.11/L.134 was submitted by the Vice-Chairman of the Committee, Mr. Torsten Westlund (Sweden), on the basis of informal consultations. After oral revisions by the representative of Malaysia (on behalf of the Group of 77) and the Secretary of the Committee, the draft resolution was adopted by consensus (for the text, see section II A, resolution 1 (X) above). Draft resolution A/CN.11/L.129 was subsequently withdrawn by its sponsors.

C. Frequency of future sessions of the Committee

108. At its 101st meeting, the Committee decided to continue to hold its future sessions, for the time being, on a biennial basis (for the text, see section II B, decision 1 (X) above).

D. Election of the Chairman and nomination of the other officers for the eleventh session of the Committee

109. At its 102nd meeting, the Chairman stated that, according to the decision taken by the Committee, the current session of the Committee was expected to elect its Chairman and nominate other officers for the eleventh session. According to the pattern of rotation, the Chairman will be from the Eastern European Group, the three Vice-Chairmen will be from the Western European Group and Other States; the Latin American and Caribbean Group, the African Group and the Rapporteur from the Asian Group. With the exception of one regional group, names of countries or persons from other regional groups had not been communicated. The Chairman of the Eastern European Group informed the Committee that the name of the country, as well as the person of the Chairman-designate for the eleventh session, would be nominated shortly. The representative of the Latin American and Caribbean Group stated that his Group had nominated the Vice-Chairman and Minister of Science and Technology of Venezuela, Mrs. Dulce Arnao de Uzcátegui, as the nominee for the office of Vice-Chairman for the eleventh session.

E. Draft provisional agenda and organization of work for the eleventh session of the Committee

110. At its 102nd meeting, the Committee approved the following provisional agenda for its eleventh session:

1. Election of officers.
2. Adoption of the agenda and organizational matters.
3. Substantive theme:

Ways and means of ensuring the participation of developing countries in international co-operation for research on and development of environmentally sound technologies, and the rapid and effective transfer of such technologies to the developing countries.

Documentation

Report of the Secretary-General on ways and means of ensuring the participation of developing countries in international co-operation for research on and development of environmentally sound technologies.

4. Financing science and technology for development.

Documentation

Report of the Secretary-General on financing science and technology for development.

5. Assessment of the impact of the activities of the United Nations system in promoting endogenous capacity-building in developing countries in the field of science and technology.

Documentation

Report of the Secretary-General on the assessment of the impact of the activities of the United Nations system in promoting endogenous capacity-building in developing countries in the field of science and technology.

6. Activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development, the Advisory Committee for Science and Technology for Development and the United Nations Fund for Science and Technology Development.

Documentation

Report of the Secretary-General on the activities of the United Nations system in science and technology for development, including those of the Centre for Science and Technology for Development.

Report of the Secretary-General on ways and means of assisting developing countries in enhancing their capacity to assess new technologies and new materials, as well as the processing of raw materials.

Report of the Advisory Committee on Science and Technology for Development.

7. Other matters.

VI. CONCLUDING REMARKS

111. A representative of one developed country stated that his country has had reservations concerning the future of the United Nations Fund for Science and Technology for Development, although it had made significant contributions to the Fund. A representative of another developed country stated that his delegation believed that the Committee's work could be handled by the Economic and Social Council without adversely affecting the integrity of the Centre. His delegation also did not subscribe to the macro-economic assumptions given to explain disparities in science and technology capacities between the industrialized and developing countries.

112. The representative of Malaysia, speaking on behalf of the States members of the Group of 77, stated that his Group attached great importance to the role of science and technology for development as an instrument for the improvement of the quality and standard of living and the eradication of poverty in the context of the promotion of economic growth and development for billions of people living in the third world. The developing countries were facing an adverse international economic environment that included, among others, the external debt crisis, net transfer of resource flows, decline of financial resource flows and deterioration in the terms of trade, in particular commodity trade, which had adversely affected the capacity of developing countries to foster and finance their activities in science and technology for development. They believed in the continued validity of the Vienna Programme of Action. Rapid and effective transfer of environmentally sound technologies to developing countries was a critical element in the process of endogenous capacity-building. Transfer of such technologies on concessional and preferential terms would expedite the participation of developing countries in international co-operation for research and development of environmentally sound technologies.

113. He also stated that the Centre for Science and Technology for Development, in its preparation for the substantive theme for the next session, should give particular attention and dedicate a separate chapter in their study to this aspect. The Centre should also take into account the following factors while preparing its reports on the activities of the Centre for the eleventh session: science and technology strategies regarding the industrial reconversion process with reference to the role of the private sector of developing countries and the mechanisms to relate the technology policies with industry and trade policies; education and training of human resources in priority areas, such as management of technological change, technology forecasting and technology monitoring; and supply and demand capacities of science and technology in the field of high technologies. Science and technology in the least developed countries was at a very rudimentary form and those countries continued to be left behind. Those countries looked forward to assistance, including in the field of science and technology for development, from the international community. The Centre and the Fund should support those efforts, and the Fund should be maintained as an identifiable entity.

114. The Executive Director of the United Nations Centre for Science and Technology for Development stated that the Committee, in recent years, had paid particular attention to the substance of applying science and technology for development in contrast to the earlier years, when it was preoccupied with the means. The decision taken at the current session constituted an extension of the substantive theme approach to the debate of the General Assembly on important issues with significant scientific and technological implications. Another major

decision taken by the Committee was to pursue the concept of coalition of resources. The timing of the sessions of the Committee would need to be reviewed so that its decisions could provide the substantive inputs into the preparation of the programme budgets of the Centre for Science and Technology for Development before they were approved by the Committee for Programme and Co-ordination and other concerned bodies of the United Nations.

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