

**Comments on**  
*Discussion note for the UNCTAD panel meeting*  
Geneva, 20-21 December 1996  
**UNCTAD Commission on Science and Technology for Development:**  
**Preparatory activities for the 20<sup>th</sup> Anniversary of the**  
  
**‘Vienna Programme of Action’**  
**and a Common Vision for the Future**

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## PART A: FROM GENEVA TO VIENNA AND AFTERWARDS

On three occasions, each time in the interval of eight years, i.e. in 1963, 1971 and 1979, the United Nations System as a whole has undertaken tremendous efforts to introduce the broad range of the notion of Science and Technology into the Development Process:

1. The first event in 1963 was the Geneva *United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas (UNCSAT)*. The Conference was initiated by the United Nations Scientific Advisory Committee (SAC) and held under the auspices of the United Nations.

Other scientific conferences under United Nations auspices with a more specific focus had preceded it, notably one on *New Sources of Energy* in 1961, the two which were convened to discuss the *Peaceful Uses of Atomic Energy* in 1955 and 1958, and, as early as 1948, the *United Nations Scientific Conference on the Conservation and Utilization of Resources*.

In breadth of scope, compared to all other conferences, UNCSAT was unique. It touched on all the scientific disciplines and almost all aspects of modern society. More than 2000 papers were submitted. The participants numbered 1.665 and 96 governments were represented.

It had two major flaws: (1) From the participants only 16 % were from developing countries. (2) ECOSOC never meant for UNCSAT to be empowered to make recommendations to Governments or to take any decision regarding policy. It was the responsibility of ECOSOC, which had convened UNCSAT, to decide what action should be taken within the United Nations to provide a practical follow-up. When considering the conference results, the Council felt that no new machinery was required for science and technology activities within the UN system but rather that „the possibilities of utilising the existing agencies should be developed to the fullest extent, with due attention to strengthening them individually and, as necessary, strengthening their co-ordination arrangements as well.“

In the light of the Conference results, ECOSOC created the *United Nations Advisory Committee on the Application of Science and Technology for Development (ACAST)* which was given far-reaching responsibilities. It created further for the inter-agency coordination the *ACC Subcommittee for Science and Technology* and as a secretariat unit for both the *United Nations Office for Science and Technology (OST)*. The GA resolution 1944 (XVIII) requested ACAST „to examine the possibility of establishing a programme of international co-operation in science and technology for economic and social development, in which scientists and technicians of the highly developed countries would, as a matter of priority, help to study the problems of the developing countries and explore suitable solutions...“ Among the various possibilities which the Assembly recommended that ACAST should envisage was that of „obtaining the human, technical and financial resources required for the execution of such a programme

2. The second event was the presentation of a comprehensive *World Plan of Action for the Application of Science and Technology to Development* to ECOSOC in the year 1971. The Plan was the result of joint efforts in the 1960s of individual experts and in particular of the

specialised agencies of the UN system. The World Plan was preceded much earlier, i.e. already in the years 1958 to 1960 by a survey of „*Current Trends in Scientific Research*“ undertaken by Pierre Auger of UNESCO under the joint auspices of the United Nations and of UNESCO.

The ACAST World Plan of Action dealt in Part I with *Priority areas of research*; with *Priority areas for the application of existing knowledge*; with *The building up of an indigenous scientific and technological capacity*; with *The implementation of the World*

*Plan of Action* and with a *Proposal for a World Plan of Action fund, or account*.

Part II dealt with *Science and Technology Policy and institutions*, with *Science and Technology Education* and with *Sectoral Issues*.

ACAST estimated that the proposed that the World Plan of Action fund should be of an order of magnitude of 250 Mill.US-\$ and should be administrated by UNDP.

The World Plan of Action was finally not addressed. It was felt that ACAST as well as the UN specialised agencies could not substitute for the will of governments. Having only an advisory function, ACAST lacked the necessary coupling with the policy-making process. As a result, even though it served to focus political attention on science and technology related to development, ACAST it was not adequate to launch political actions on the field of science and technology for development.

This was one of the reasons why ECOSOC created in 1972 a new intergovernmental Committee on Science and Technology for Development (CSTD), which like ACAST and the ACC Subcommittee on Science and Technology was also to be serviced by the UN Office for Science and Technology. The CSTD did not endorse the World Plan of Action but instead proposed in August 1974 to ECOSOC the launching of a new intergovernmental

Conference on Science and Technology for Development as part of the preparatory work leading ultimately to the creation of a New International Economic Order (NIEO).

3. The third attempt of the UN to introduce the issue of Science and Technology on the World's agenda was *the United Nations Conference on Science and Technology for Development (UNCSTD)*, which took place from 20.-30. August 1979 in Vienna. It was preceded from 13.-17. August 1979, also in Vienna, by an *International Colloquium on Science, Technology and Society: Needs, Challenges and Limitations*, organised by ACAST and attended by 281 participants from the scientific community and by 102 representatives from 23 UN agencies.

UNCSTD was attended by 142 national delegations with 1856 delegates, advisors and representatives from UN agencies, other IGO's and NGO's.

The Conference adopted by acclamation the *Vienna Programme of Action on Science and Technology for Development (VPA)*.

The VPA presented in two main sections

*Section I: Strengthening the science and technology capacities of the developing countries,*

*Section II: Restructuring the existing pattern of international scientific and technological relations*

in a negotiated language, acceptable to all delegations present all the important issues in the application for science and technology and for methodologies for which ACAST as well as the UN agencies concerned and the scientific community has laid the groundwork.

*Section III: Strengthening the role of the United Nations System in the field of Science and Technology and the provision of increased financial resources*

contained the most controversial part of the VPA. In the words of *Essam Galal* of Egypt, who was one of the leading figures in the long negotiation process leading to UNCSTD and who became later a Chairman of ACSTD, the successor advisory body to ACAST, 'it is in hindsight perhaps that the high attention which the funding aspect and the related institutional arrangements received has somewhat blurred the much more important goals

of sustained mobilisation policies and linkages.’

As a result of the UNCSTD negotiations all institutional arrangements on science and technology within the UN were abolished and replaced by a new mechanism:

- The UN Committee on Science and Technology for Development (CSTD), a specialised Committee of ECOSOC became the *UN Intergovernmental Committee on Science and Technology for Development* (IGCSTD) open to all member states, reported directly to the UN General Assembly.
- The UN Advisory Committee on the Application of Science and Technology to Development (ACAST), an advisory body of 28 members, became the *UN Advisory Committee on Science and Technology for Development* (ACSTD), consisting also of 28 members.
- The Inter-agency coordinating mechanisms, i.e. the ACC Sub-Committee for Science and Technology chaired *ex-officio* by the Director of the UN Office for Science and Technology, became the *Inter-agency Task Force on Science and Technology* chaired by annual rotation by one of the specialised agencies or by the UN
- The UN Office for Science and Technology headed by a Director became the *UN Center for Science and Technology for Development* headed by an Assistant Secretary-General.

For the Financial Arrangements an *Interim-Fund* was created to be administered by UNDP for which the targeted volunteer contributions for the two years following UNCSTD, i.e. 1980 and 1981 *should be no less than \$ 250 million*. This amount equalled exactly the amount which ACAST called for in 1971 for the implementation of its ‘World Plan of Action’. The ‘Long-term arrangements’ within UNDP for the intended *Financial System on Science and Technology for Development* (FSSTD) were meant to start in 1982. At one time, there have been expectations that the FSSTD would be able to mobilise funds in an order of magnitude higher than that of the UNDP.

All-in-all, the funds mobilised through this new mechanism were considerably less than the aggregated costs UNCSTD: Taking into account all stages of its so-called ‘*ascending process*’ the Vienna Conference has costed to the world’s tax-payers an estimated amount of \$ 50 Million.

Ten years after UNCSTD a series of activities was undertaken to take stock of the results achieved: *End-of-decade-review* of the VPA by the UN, an assessment by the science community and by UN agencies organised by UNESCO, an assessment of various UNCSTD-related issues by the German Foundation for International Development and the UN. There are numerous others.

In view of the unsatisfactory situation, the United Nations have decided to abolish the post-UNCSTD-machinery: IGCSTD, ACSTD, UN Center for Science and Technology for Development, Secretariat of the FSSTD within UNDP.

The *Commission on Science and Technology for Development* of UNCTAD has been mandated by the General Assembly to continue the work set in motion by the above mentioned ‘post-Vienna’-mechanism.

## PART II: THE SITUATION 20 YEARS AFTER UNCSTD

The momentum kept alive in all the decades since the 1950s in the UN system to focus on the role of science and technology as one of the preconditions to foster development seems somewhat to have disappeared in the 1990s. It is, therefore, to be welcomed that UNCTAD is

making an effort to revitalise the debate on this key issue and to launch, if possible, *a new vision* 20 years after UNCSTD and on the eve of a new millenium.

- Post-Vienna, the UN does not dispose anymore of a *Scientific Advisory Committee (SAC)* which gave counsel to Secretary-Generals Hammarskjöld, U Thant and Waldheim nor of an advisory Committee like ACAST or ACSTD which gave advise to ECOSOC and the GA.
- UNESCO which was asked after UNCSAT to introduce the science and technology policy function in member states has given up this activity in the 1980s. It has also stopped the organisation of regional Ministerial Conferences (MINESPOL, CASTAFRICA, CASTASIA, CASTALAC, CASTARAB).
- The World Bank has abolished the post of ‘Science Advisor’
- In the former socialist countries the science and technology infrastructure has become one of the first victims of the fast transformation of the economies concerned.
- Within the process of globalisation the US has become the country in which all science-based MNC’s are bound to maintain R&D Lab’s in order to remain within the mainstream of scientific and technological developments
- The ‘gap’ between developed and developing countries seems to be fast widening
- The former socialist countries like most of the developing countries when confronted with competing development targets are not using international funds made available to them for the building-up of their science and technology infrastructure but rather for more pressing immediate needs.
- Many OECD countries are complaining that the present budget deficits result in drastic cuts in R&D spending and in university funding.
- Fundamental (or basic) research is increasingly seen by budgets committees as ‘luxury’.
- New issues are emerging or are receiving new attention since UNCSTD: The social dimension of Science and Technology, Ethics in Science and Technology, the gender issue, innovation and creativity as key factors for international competitiveness, brain drain, the role of Science and Technology in job creation
- All 14 UN Conferences organised since 1990 are containing an important element on science and technology, but there seems to be no comprehensive approach dealing with the newly defined needs, targets and conference ‘action plans’
- The World Bank President, J. Wolfensohn, seems to be determant to transform the World Bank into a *World Knowledge Bank*.
- The regional and sub-regional different developments of Science and Technology do not seem to receive the necessary attention
- UNESCO has taken up its ealier efforts to publish comprehensive Science reports: *World Science Report 1993 and World Science Report 1996*. In 1961 it has published together with the UN the so-called ‘Auger Report’: *Current Trends in Scientific Research* and in 1977, authored by Adriano Buzzati-Traverso: *The scientific enterprise, today and tomorrow*.
- UNESCO is planning the organisation in 1999 of a *World Science Conference*. The newly created International Scientific Advisory Board (ISAB) advised the Director-General **not** to name this meeting *World Science and Technology Conference*. The technological elements of the developments since UNCSTD should, therefore, be addressed within another complementary framework.
- Like UNCSTD and its preceding ACAST Colloquium which has mobilised more than 100 UN agency representatives as active participants it seems to be highly desirable that the UN system organises a joint and integrated event to mark the 20<sup>th</sup> anniversary of UNCSTD.

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