

NRD/STS/MR/BUR/92

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

Mission Report

**ECA's representation at High-level Meeting of Experts
on Science and Technology for Development**

Bujumbura, Burundi, (4 - 8 May 1992)

**Soodursun Jugessur, Chief
Science and Technology Section
Natural Resources Division
29 May 1992**

HIGH-LEVEL EXPERTS MEETING ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT, BURUNDI, 4 - 8 MAY 1992

INTRODUCTION

1. The Science and Technology Branch of the United Nations Department of Economic and Social Development invited the Economic Commission for Africa to be represented at a high-level meeting of experts on Science and Technology Development, in Bujumbura, Burundi, from 4 - 8 May 1992. In its invitation, New York stated that on 13 April 1992, the General Assembly had taken the decision to transform the Intergovernmental Committee on Science and Technology for Development and the Advisory Committee on Science and Technology for Development of the Economic and Social Council (ECOSOC) into a functional Commission on science and technology. This had necessitated the holding of a high-level meeting of experts in the place of the originally planned meeting of the Advisory Committee on Science and Technology for Development.

2. Three themes were the focus of the Burundi meeting, namely:

- Science and technology for the development of the least developed countries;
- the role of technology in industrialization and regional economic integration;
- transformation of the Intergovernmental Committee and the Advisory Committee into a functional Commission of ECOSOC.

3. Since these themes are of direct concern to the African region, Mr. S. Jugessur, the Chief of Science and Technology Section at the ECA, was delegated to represent ECA at the meeting.

PARTICIPATION AND PROGRAMME

4. International experts from seventeen countries, including four African, participated in the meeting. The list of experts is attached in annex I.

5. The agenda and the programme of work are attached in annex II and III. The meeting was organized at the invitation of the Government of the Republic of Burundi, and the programme included the presentation of the Burundian experience, as an example of a least developed country. As such, it was opened by the Prime Minister of the Republic of Burundi, Mr. Sibomana Adrien, in the presence of the Minister of Higher Education and Scientific Research and the State Minister for Science and Technology.

THEME I

Science and technology for the development of the least developed countries

6. This topic was chosen by the former Advisory Committee as a follow-up to the Conference on the Least Developed Countries held in Paris in November 1990, and to take advantage of Burundi as the venue of this meeting. A case study on science and technology in Burundi had been prepared by a local expert, and a report of the Advisory Committee review team on the assessment of science and technology in Burundi, as well as a report of an ad-hoc panel of experts of the same committee which met in Jamaica in December 1991, on the issue of science and technology for least developed and small developing countries.

7. The all-comprehensive reports analyzed the issues related to science and technology for least developed and small developing countries from the view point of experts of developed countries to whom science and technology aim at developing a capacity to create new technologies. Not enough stress is laid on the application of available, off-the-shelf, science and technology which is relevant to the needs of least-developed and small developing countries. The capability for informed judgement or decision and for selection and utilization of technologies should take predominance over adaptation and creation of new technologies. The ECA representative highlighted these issues, and stressed the need for considering cultural prerequisites in the development and application of science and technology. This involves the demystification of science and technology through bringing out the inherent merits of traditional technologies in their upgrading process, and the need to popularize science and technology through the rural and urban media, involving women and girls. These points were well taken and are included in the recommendations.

8. The major problems faced by least developed and small developing countries, their vulnerability in the context of a rapidly changing global economy, their limited access to available technologies because of a weak endogenous capacity, the practical absence of the private sector in most of them and the need for a critical mass of scientists and technologists were highlighted. The recommendations agreed to stress on:

- (a) Management of resources and the building of endogenous capacity;
- (b) greater emphasis on infrastructures for and linkages of technology in S&T policy, and;
- (c) science and technology development and transfer as a response to local demand.

9. Donors were encouraged to maximize the participation of local suppliers, sub-contractors and technical personnel as part of their programme policy, while funding projects for LDC's. In order to ensure proper absorption of technologies, they are advised to place greater emphasis on soft aspects of technology, like technical know-how, local management and organization and maintenance problems. The involvement of stakeholders, the provision of statistical data on S&T resources, including S&T indicators are areas to be favoured by donors.

THEME II

Technology in industrialization and rational economic integration

10. This theme was tackled by two working groups.

(a) Privatization of publicly-funded industrial research and development institutions, and

(b) Role of technology co-operations to foster economic regional integration.
The ECA representative was chosen to act as rapporteur for (b) above.

11. On the issue of privatization of publicly funded industrial research and development institutions, it was stressed that privatization here does not mean the transfer of all assets to the private sector, but a greater role of the private sector in a demand-oriented activity where governments still continue to fund basic, strategic, environmental and other research that may have long-term impacts and that are not commercially viable. Venture-capital facility and tax deduction to enterprises commissioning research projects to industrial laboratories, should be provided by governments. It was also stressed that in the case of LDC's, privatization will first require the promotion of local entrepreneurship through the encouragement of small, medium and large scale industries by suitable government policies, and multinationals should be encouraged to subcontract part of their research to the local publicly funded research laboratories.

12. As regards the role of technology co-operation to foster economic regional integration, it was observed that Europe had shown the way by promoting such cooperation which has now led to a European Common Market. The conditions necessary for such an economic integration, the advantages that follow, and the measures to be adopted by developing countries in other regions, were highlighted. It was brought out that information, communication and transportation technologies should be promoted as a priority as they form the basis for any regional and sub-regional integration. Biotechnology with its potential to solve food problems, energy technologies and their impact on environment, cooperation and industrial development, new technologies that impact on the economies of developing countries, and the role of the private sector in socio-economic development were issues that deserve serious study, as they can lead to sub-regional and regional economic integration.

THEME III

Transformation of the Intergovernmental Committee and the Advisory Committee into a functional Commission of the ECOSOC:

13. The General Assembly has decided to transform the former Intergovernmental Committee on Science and Technology for Development and its subsidiary body, the Advisory Committee into a new Commission on Science and Technology for Development. The former advisory Committee had been asked to reflect on its own experience and to make suggestions on how the new Commission could be most effective.

14. The meeting reviewed the activities of the Advisory Committee, and how it had fulfilled its tasks through its composition, frequency of meetings, location of meetings and secretariat support. Based on its experiences, the meeting recommended the following:

- (a) The Commission on Science and Technology for Development should establish its own Advisory Committee modelled on the previous Committee. The members should represent stakeholders concerned with science and technology and development. It is conceivable that the Advisory Committee might be formed from the named members of the Commission. However, it is essential that the Advisory Committee members be appointed on their personal capacities and not as spokes-persons for their governments. The other characteristics of the former Committee should also be maintained as far as possible. Without such a sub-group or Committee, much of the real value of the combined IGC and ACSTD will be lost.
- (b) The relations between the new Advisory Committee and those parts of the UN system operationally involved in relating science and technology to development should be strengthened. This could be done by including some individuals from the Agencies on the Committee or by building on the bilateral channels of communication which were developed by the former Committee.
- (c) The Advisory Committee should be empowered to call witnesses from the UN system and to be able to cross examine them about the contributions of their agency to the topic under investigation. The Committee's report and the UN response should be published.
- (d) If the proposal to establish a New Advisory Committee is rejected, then as a fallback position, panels of independent experts should be convened between sessions. The problem with this approach is that it is likely that there will be lack of continuity between members of the panels. This might be overcome by ensuring that the Commission Bureau members participated in the panels.

15. Without the introduction of the above recommendations, the former Advisory Committee members believe that it will be difficult for the proposed Commission to be an effective body.

CONCLUSION

16. It was necessary for the ECA representative to be present at the meeting and present the views on issues of concern to the region. Since most of the experts were from outside the region, and since many of them were from developed countries, their views were often not in line with priorities and requirements of the African region where most of the LDC's are. ECA's activities were highlighted, and our orientation on the application of science and technology rather than on the development of science and technology was accepted as a way to accelerate the socio-economic development of developing and least developed countries. ECA's participation in the new Commission for Science and Technology has to be ensured so that the regional issues in this area be given proper consideration, and the donor committees be made aware of the nature of these issues.

Bujumbura, 03 May 1992

HIGH LEVEL MEETING OF EXPERTS ON
SCIENCE AND TECHNOLOGY
FOR DEVELOPMENT

4 - 8 MAY 1992

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HIGH-LEVEL MEETING OF EXPERTS ON
SCIENCE AND TECHNOLOGY FOR DEVELOPMENT
4-8 May 1992
Bujumbura, Burundi
Item 1 of the provisional agenda

ADOPTION OF THE AGENDA AND ORGANIZATION OF WORK

Provisional agenda

1. Adoption of the agenda and organization of work.
2. Science and technology for the development of the least developed countries.
3. The role of technology in industrialization and regional economic integration.
4. Transformation of the Intergovernmental Committee and the Advisory Committee into a Functional commission of this Economic and Social Council.
5. Conclusion and adoption of the report

Bujumbura, 03 May 1992

**HIGH LEVEL MEETING OF EXPERTS ON
SCIENCE AND TECHNOLOGY
FOR DEVELOPMENT
4-8 MAY 1992**

Program of work.

Sunday, 3 May 1992.

- Arrival of the participants, informal discussions.

Monday, 4 May 1992.

- 08h00 AM : - Arrival of guests.
- 08h15 AM : - Arrival of the Prime Minister.
- 08h30- 09h30 AM : - Opening session.
 - 1) Statement by the Chief of Science and Technology Branch, U.N. Department of Economic and Social Development : Mr.Carlos Nones Sucre.
 - 2) Speech of Professor Oldham : (Chairman of the Group of Experts on Science and Technology for Development).
 - 3) Opening statement by the Prime Minister of Burundi : Mr.Adrien SIBOMANA.
- 09h30- 09h45 AM : - Break.
- 09h45- 10h00 AM : - Adoption of the agenda and organization of work.
Item 1
- 10h00- 12h00 AM : - Presentation and discussions of the report of the panel of experts on Science and Technology for LDCs.
Item 2
- 12h00- 02h00 PM : - Lunch.

- 03H00- 05H00 PM : - Presentation of the issues related to technology in industrialization and regional integration, and plenary discussion.
- 06h00- 08h00 PM : - Cocktail offered by the Minister of Higher Education and Scientific Research.

Tuesday, 5 May 1992.

- 08h00- 10h00 AM : - BURUNDI DAY
Item 2 Presentation by Burundi representatives.
- 10h00- 12h00 AM : - Presentation and discussions of Burundi case study.
- 12h00- 02h00 PM : - Lunch.
- 02h00- 03h30 PM : - Presentations and discussions on ACSTD mission to Burundi.
- 03h30- 05h00 PM : - Formulation of recommendations on LDCs.

Wednesday, 6 May 1992.

- 08h30- 12h00 AM : - Working group sessions :
Item 3
 1. a) Implications of the privatization of industrial research organizations;
 - b) Promotion of technological innovation and its linkage to production.
 2. Regional economic integration.
- 12h30- 02h00 PM : - Lunch.
- 02h00- 05h00 PM : - Reports of the working groups and discussion.

Thursday, 7 May 1992.

- 08h30- 12h00 AM : - Review of the past ACSTD work Functional Commission on Science and Technology for Development.
- 12h00- 02h00 PM : - Lunch.
- 02h00- 05h00 PM : - Discussion on item 3.

Friday, 8 May 1992.

- 08h30 AM- 01h00 PM : - Drafting of the report,
field trip : TEZA
- 01h00 PM- 03h00 PM : - Lunch.
- 03h00 PM- 05h00 PM : - Consideration of the draft report
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Closure of the session
- 06h00 PM- 08h00 PM : - Cocktail offered by the Minister of
External Relations and Cooperation.