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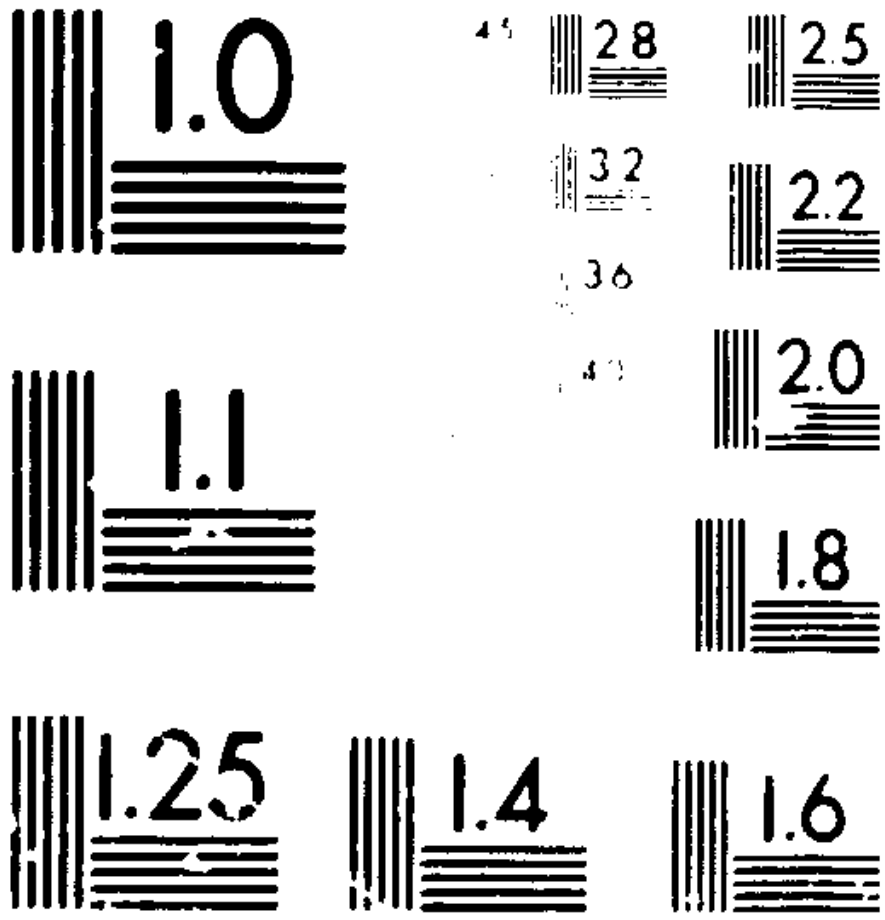

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Informal "brainstorming" session,
Vienna, March 19-20, 1984

TECHNOLOGIES FOR HUMANITY

A PRELIMINARY NOTE*

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BACKGROUND

1. At the International Forum on Technological Advances and Development, organized by UNIDO at Tbilisi, April 1983, the Executive Director of UNIDO, Dr. Abd-El Rahman Khane, said that "in approaching the question of technological advances, the human being must continue to remain at the centre of our concern, both as the user of technology and as its beneficiary." It was agreed that high intellectual inputs are needed to solve the ground level problems of the rural poor and that technological advances (TA) offer great promise opening alternate pathways for industrialization, for greater employment, equity, productivity, rural development and for improving the quality of life of people. Thus the application of TAs should not be the monopoly of the industrialized countries (ICs) but should serve even more the purpose of development of developing countries (DCs). In the present state of technology generation, however, technologies specifically addressed to developing country requirements do not get developed automatically. Against this background new mechanisms of international co-operation between DCs themselves and between DCs and ICs are called for.

2. It is in the above context that a new form of international co-operation has been envisaged. It is that the International Community may launch a broad frontal attack instead of engaging in occasional and unrelated skirmishes with the problems of applying TAs for development. For this purpose a limited number of new technological advances to meet particular needs of a clear urgency to the human community be identified and designated as "technologies for humanity" (TH).

3. Such TH may be clearly defined, developed and disseminated in the public domain. International efforts may be focused on specific problems, find appropriate solutions and disseminated throughout the world, more particularly in DCs. All nations may be encouraged to contribute. Commonly funded programmes for such TH could enable dissemination of the fruits of modern science and technology to improve the quality of life of humanity at large. It should become an international movement to reinforce the commonly held aspiration that the human being must be the centre of concern in technological development.

4. Such an endeavour involves not only the mobilization of financial resources and scientific talents but also the will and commitment of a number of countries as also the dedication and participation of the international scientific and technological community.

5. The Forum asked UNIDO to work further on this concept of TE and the new form of international co-operation and present it to UNIDO IV for consideration.

6. Another important means of demonstrating a new spirit for international co-operation is through considering the implications of TAs for future world development at highest policy levels among all countries. A suggestion was made that UNIDO examine the possibility of convening a "Technological Summit".

7. In this connection, a workshop organized by UNIDO in Dubrovnik in June 1983*/ suggested that an International Roster of Scientists and Technologists in TAs be developed, to mobilize the co-operation of scientists and technologists in the development of applications unique to developing country conditions and in particular in the development of TH.

8. It is against this background that the present "brainstorming" session is organized. It is suggested that the discussion may centre around the following issues:

I. IDENTIFYING AND DEFINING CANDIDATE TECHNOLOGIES FOR HUMANITY

9. Criteria;
Forums for discussion, debate and decision;
Advisory group;
Preparation of concrete proposals;
Examples of candidate technologies:
Malaria/Leprosy/Influenza vaccines
Low-cost rural communication
Low-cost health care, diagnostic kits
Nitrogen fixation etc.

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*/ "Report of the Workshop on Institutional and Structural Responses of Developing Countries to Technological Advances", Dubrovnik, Yugoslavia, 31 May to 4 June 1983 (ID/WG.401/7).

Biomass for food, fodder, fertilizer, fuel

Drugs

Population control

II. IDENTIFYING GENERATORS OF CANDIDATE TECHNOLOGIES FOR HUMANITY

10. Those that are already active in these problem areas

Foundations and others that fund research (industrial development research centres, United Nations agencies etc.)

Those that could be induced to join the effort

International roster; ICSU; National Academies

International research centres/networks (CGIAR/MIRCENS/IBN etc.).

For example: Malaria vaccine

- New York University
- Walter and Elizabeth Hall, Institute for Medical Research, Melbourne, Australia, etc.

III. TH - WHOSE PROPERTY?

11. TH be in the public domain only

An international agreement;

Purchase by an international corporation for releasing TH to DCs in graded scale of payments;

International centres/international funding foundations, research contracts etc.;

Related know-how made available;

Other such mechanisms to obtain TH property;

IV. TH - TRANSFER

12. Mechanism of transfer;

Terms of transfer;

Agents of transfer;

Involvement of NGOs, UN agencies, companies (public, private, national, transnational etc.);

University Licensing Association of Biotechnology (ULAB, a nonprofit body to market biotechnological patents by universities);
Voluntary organizations (Rotary, Kiwani, Lions Club, Vita etc.).

V. FUNDING

13. Agencies (CIDA/SIDA/USAID/UN/Rockefeller/Ford/CGIAR);
Mechanisms;
Terms.

VI. MAKE IT AN INTERNATIONAL MOVEMENT - HOW?

14. Political movement:

Unless there is a firm commitment to and faith in the TH movement by the leaders of the day, progress could only be slow. How does one go about getting social, political will and commitment?

Discussions in UN fora;
Personal involvement of a few top leaders (eg. Mitterand, Trudeau, Willy Brandt, Robert McNamara, Maurice Strong etc.);
International science clubs (eg. Rotary, Kiwani, Lions - both professionally and managerially capable).

15. Scientific movement:

UN agencies;
Involve Nobel laureates (Kendrew, Huxley, Salk, Singer et al.);
An advisory committee with some top names;
International roster;
ICSU and its constituent scientific unions, COSTED etc.;
National and international academies and professional bodies;
Science foundations, e.g. IFIAS etc.;
Science/development journals;
NGOs and others.

VII. METHODOLOGY OF FOLLOW-UP

16. At the end of the brainstorming session, the next steps should become clear in regard to the following:

Preparation of a detailed concept paper ready for presentation if necessary during UNIDO IV Conference;

Goals, objectives and concepts of TH;

Candidate technologies (CTH) - select one or two to start with;

Means and methods to generate, transfer and utilize CTH;

Mechanisms for international co-operation;

How to make it an international movement and not to have only a noise effect;

Mechanisms for international funding;

Appropriate budgets;

International roster of scientists and technologists;

Matchmaking between tasks (CTH) and talents and funds - setting up one or two task forces;

Setting up an advisory group/steering group;

Involvement of other bodies - scientific and financial along with UNIDO;

Other related matters.

VIII. PLAN OF ACTION, SEQUENCE OF STEPS AND TIME FRAME