

International Institute for Environmental Technology and Management

Please reply to this address:

Prof. M.S. Swaminathan,
Madras, India

From the Office of the Chairman
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16 April 1991

Dear Professor Swaminathan,

I was very pleased to learn that you have become one of the authors of a Theme on...
I am sure that your contribution will be most valuable to the...
I look forward to receiving your response.

Table with multiple columns and rows, containing numerical data and possibly names or identifiers. The text is very faint and difficult to read.

Dear Professor Swaminathan,
 I am faxing across the ICSU
 ASCEND 21 material prior
 to mailing it to you. Please
 fax me if you have a bad
 copy.

Best regards,
 Gordon Goodman

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Paris, 18 March 1991

Dear

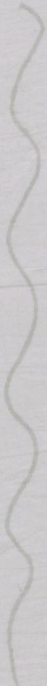
The International Council of Scientific Unions has been requested by the Secretary General of the United Nations Conference on Environment and Development (UNCED) to be its principal science advisor. In this capacity it is organizing in November 1991 an *International Conference on an Agenda of Science for Environment and Development into the 21st Century (ASCEND 21)*. The output from this will be made available to the UNCED to be held in Rio de Janeiro in June 1992. ASCEND 21 will essentially be a Working Conference, aimed at developing strategies for the future. Reviewing the past will be relevant only to the extent that it would help us in this task. The enclosed document outlines the structure and the working methods of the Conference.

The Bureau of the Advisory Committee for ASCEND 21 invites you to be a co-author for the basic working paper for Theme 1, Section I on the topic Pages 2, 3 and 4 of the enclosed document contain advice to authors on treatment and coverage of the individual Themes. The Coordinator for Section I is Dr. Gordon Goodman. If you accept this invitation, he will contact you to discuss details.

There will be a meeting of all authors together with the Advisory Committee at the premises of IAS in Laxenburg, Austria, 2-4 July 1991. The drafts of the Theme papers will be examined and discussed there in order to seek coherence among the papers, rectify overlaps and identify important gaps. A revised version of each Theme paper should be available for circulation by 15 October 1991.

Although interpretation in English, French and Spanish will be available (if required) at the Conference, all written materials for the Conference will be in English.

B



Acceptance of this invitation would imply your agreement to:

- correspond with your fellow co-author (whose name will be communicated to you shortly) on the structure, coverage and content of your joint paper;
- submit by 15 June a draft of the paper to be presented at the July meeting;
- attend the meeting of authors in Laxenburg, 2-4 July;
- revise the draft paper in the light of the July discussions and submit a final text by 15 October 1991 to enable its circulation before the Conference;
- participate throughout the Conference in Vienna, 24-29 November 1991.

ICSU and its co-sponsors will cover your travel and daily expenses associated with the July and November meetings in Austria. In addition we may have funds to help with communication costs between co-authors.

The Bureau realises that the above schedule of tasks is onerous, but feels that you share their concern that as good a scientific strategy as possible be developed to assist UNCED, and to guide post-UNCED activities. The strict time schedule results from the fact that ASCEND 21 must be held no later than November if the output from it is to form part of the official preparation for UNCED.

I hope that you will be able to accept this invitation and be part of this interesting and important endeavour. If for some reason you cannot do so, it would assist us if you could provide one or two names of possible co-authors in your place.

May I request that you respond by teletax, telex or electronic mail within the next few days.

I look forward to our cooperation in ASCEND 21.

Yours sincerely,

M.G.K. Menon
President, ICSU

Enclosures

ANNEX 2



February 1991

INTERNATIONAL CONFERENCE ON
AN AGENDA OF SCIENCE FOR ENVIRONMENT AND
DEVELOPMENT INTO THE 21st CENTURY
(ASCEND 21)

Vienna, Austria
24-29 November 1991

organized by the International Council of Scientific Unions (ICSU)
in cooperation with the Third World Academy of Sciences (TWAS)
hosted by the Federal Government of Austria

co-sponsored by:

European Science Foundation (ESF)

International Institute for Applied Systems Analysis (IIASA)

International Social Science Council (ISSC)

The Norwegian Research Council for Science and the Humanities (NAVF) with
the Norwegian Academy of Science and Letters

.....

Members of ADVISORY COMMITTEE FOR ASCEND

M.G.K. Menon, President of ICSU, Chairman (India)
 U. Colombo, President of ESF, Vice-Chairman (Italy)
 J.C.I. Dooge, President-elect of ICSU, Vice-Chairman (Ireland)
 Abdus Salam, President of TWAS, Vice-Chairman (Pakistan)

Members from ICSU Executive Board:

U. Cordani (Brazil)
 A. Epstein (UK)
 J.W.M. la Rivière (Netherlands)
 I. Lang (Hungary)

Members from ICSU Advisory Committee on the Environment:

G. Goodman (UK)
 G. White (USA)
 P. Thacher (USA)
 N. van Lookeren Campagne (Netherlands)

Members from ICSU Committee on Science and Technology in Developing Countries:

D.A. Bekoe (Ghana)
 Anna Maria Cetto (Mexico)
 R. Daniel (India)
 M.H.A. Hassan (Sudan)

Representative of Federal Government of Austria:

U. Stacher

Invited Members:

Lou-des Arizpe	(Mexico)	V.A. Koptug	(USSR)
P. Bourdeau	(Belgium)	G. Kullenberg	(Denmark)
J. Burnett	(UK)	Lydia Makhubu	(Swaziland)
Rita Colwell	(USA)	B. Moldan	(Czechoslovakia)
F. Di Castri	(Italy)	J. Mykletun	(NAVF)
B. Döös	(IASA)	Helga Nowotny	(Austria)
R. Fuchs	(USA)	T. O'Riordan	(ESF)
G. Golubev	(USSR)	J. Smith	(ESF)
J. Houghton	(UK)	Sun Honglie	(China)
H. Jacobson	(ISSC)	M.S. Swaminathan	(India)
M. Kassas	(Egypt)	L. Walkøe	(Norwegian Academy)

A Bureau consisting of selected members (including representatives of the sponsoring bodies and host country) of the Advisory Committee, has been constituted to be responsible for the details of Conference preparations.



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Paris, 20 February 1991
Feb. 6

**INTERNATIONAL CONFERENCE ON
AN AGENDA OF SCIENCE FOR ENVIRONMENT
AND DEVELOPMENT INTO THE 21ST CENTURY
(ASCEND 21)**

**Vienna, Austria
24-29 November 1991**

The Conference will be convened by the International Council of Scientific Unions, in cooperation with the Third World Academy of Sciences (TWAS) and hosted by the Federal Government of Austria. ICSU will be assisted by an Advisory Committee whose members have been invited in their personal capacity (see attachment). The composition of the Advisory Committee reflects linkages with relevant organizations and programmes, including those in the United Nations system. A Bureau of the Advisory Committee is responsible for all details of the Conference preparations.

The following organizations have been invited by ICSU as co-sponsors of the Conference: the International Institute for Applied Systems Analysis (IIASA), the International Social Science Council (ISSC), the Norwegian Academy of Science and Letters in association with the Norwegian Research Council (NAVF), and the European Science Foundation (ESF). The latter two were the organizers of the 1990 Bergen Conference.

Funding has been sought from a number of intergovernmental agencies and private foundations and their support will be acknowledged in all documentation relating to the Conference.

OBJECTIVES

The Conference will aim to bring together the understanding and judgment of the world's scientific community on the issues of highest priority for the future of the environment and development. These should define the relevant part of the world's science agenda for the next 10-20 years providing both a consolidated contribution to the United Nations Conference on Environment and Development (UNCED, Rio de Janeiro, June 1992), and a perspective for the future directions of international science in these and related areas.

EXPECTED OUTPUTS

Direct outputs of the Conference will be:

- a) A Conference statement in the form of a synthesis based on the work of ASCEND 21 to serve as a direct input to UNCED;
- b) publication of the proceedings in forms suitable for the science community and for a wider public;
- c) proposals for follow-up activities to be carried out by the international scientific community and its partners in industry, government and inter-governmental bodies.

PARTICIPANTS

Some 200 persons from all parts of the world will be invited in their personal capacities to participate in the Conference. Participants will be selected on the basis of their scientific expertise of relevance to the Conference topics and their broad understanding of environment and development issues. In addition to natural scientists, there will be a significant number of persons from the social sciences, engineering and industry.

CONFERENCE THEMES

The purpose of ASCEND 21 is to look beyond the state-of-the-art, to formulate the environment and development research agenda and to help identify the scientific knowledge base which will be needed for rational policy decisions during the coming decades. The discussion will be centered around fifteen themes. A paper will be prepared on each theme by co-authors with complementary expertise and experience, for distribution to participants before the Conference.

Authors of the papers, which should be about 50,000 characters (15 pages) in length, should ensure that they are forward-looking and based on an informed judgment of the present state of the science: what is known for certain, what can be anticipated with a high degree of probability, what is not known and what needs to be known. They should identify future priority issues and suggest how science can help to resolve them.

Each author will be encouraged to include, where appropriate, sections devoted to:

- inventory of high priority research needs and issues
- needs for observation, monitoring and data interpretation
- physical, biological and socio-economic impacts
- policy options and their implications
- international cooperation and appropriate institutional arrangements
- communication of research results to decision-makers and the non-scientific public
- means to attract, train and retain high quality scientists in the field

In order to coordinate the papers to be presented at the Conference and to promote linkages, the authors will be brought together in July to present the first drafts of their papers to the Advisory Committee. Revised papers will be presented and discussed during the Conference.

The fifteen themes have been grouped in three sections. The list of topics found under each theme is not exhaustive and is intended as a guideline for the authors.

Section I: Problems of Environment and Development

This Section identifies the unknowns and uncertainties about major driving forces and perceived causes which are at the root of present problems and concerns, for the purpose of focusing efforts of the scientific community in helping to address them.

Theme 1: Growth of Resource Use

- growth in per capita resource use
- demographic projections
- population pressure
- urbanization
- migrations

Theme 2: Land Use

- food and fibre production and distribution
- deforestation and afforestation
- irrigation
- soil degradation and erosion
- urban encroachments

Theme 3: Industry and Wastes

- transformation of resources
- industrial, agricultural and urban wastes
- biotechnology
- improving industrial metabolism

Theme 4: Energy

- sources of energy
- efficiency of energy production
- consumption patterns: housing, industry and transportation
- market distortions

Theme 5: Health

- environmental impacts
- life style impacts
- nutrition
- preventable diseases