- biomass, photosynthetically-active region (PAR) irradiation levels and times, and degree of closure.
- Initiate ongoing analytical efforts for the purpose of further specifying the unique contributions of closed-ecology research to global ecology, CELSS, the ecological consequences of human actions, and basic ecological research.

Copies of the summary report of the Workshop are available, free of charge, form the undersigned:

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AD HOC WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS FOR THE ELABORATION OF A GLOBAL FRAME-WORK CONVENTION FOR THE PROTECTION OF THE OZONE LAYER, HELD AT THE SWEDISH MINISTRY FOR AGRICULTURE AND THE ENVIRONMENT, STOCKHOLM, SWEDEN, DURING 20–28 JANUARY 1982

In recent years, concern has been expressed on the possibility of a reduction in the amount of ozone present in the stratosphere—such as might be attributable to photochemical reactions involving certain trace-substances whose concentration appears to be increasing as a result of human activities. In response to this concern, the twenty-eighth session of the Executive Committee of the World Meteorological Organization (WMO) approved the WMO 'Global Ozone Research and Monitoring Project' in June 1976. Subsequently the United Nations Environment Programme (UNEP) adopted a 'World Plan of Action on the Ozone Layer' at a UNEP Meeting of Experts, designated by governments and intergovernmental and nongovernmental organizations, on the ozone layer, which was held in Washington, DC, in March 1977.

As the studies carried out under the UNEP World Plan of Action and the WMO Global Ozone Research and Monitoring Project continued to indicate a real threat to the ozone layer, the ninth session of the Governing Council of UNEP, held in May 1981, decided to initiate work aimed at elaboration of a global framework convention for the protection of the ozone layer. In persuance of this decision the above meeting was convened at which representatives from 27 countries, two UN Agencies (WMO and WHO), and two international organizations (OECD and EEC), were present and in many cases took part in the discussions.

The meeting was opened by Dr Mostafa K. Tolba, Executive Director of UNEP, who stressed in his introductory statement that all the most reliable scientific evidence pointed to continuing depletion of the Earth's ozone layer by Man's chemicals unless the international community took preventive action. He added that the meeting had before it a draft text of a framework convention prepared jointly by Finland, Norway, and Sweden, and that he welcomed the flexibility of the draft offered by way of annexes and/or protocols.

The elected chairman, Ambassador G. Svenson (Sweden), stated that the objectives of the meeting were to lay the foundation (i.e. structure and format) for a suitable Convention, including discussion of institutional arrangements and of those scientific components which might require special collaboration.

Following technical presentations, the meeting accepted that there is still uncertainty about the extent to which the ozone layer may be depleted and the extent of any concomitant or other climatic change. Nonetheless there was agreement that precautionary action was necessary for the sake of Man and his environment. However, disagreement was evident and views ranged from a strongly-worded Convention aimed at prohibition of chlorofluorocarbons, to the contention that no Convention was really necessary at this time. Nonetheless, the experts agreed to discuss the general elements and issues that could be contained in a future Ozone Protection Convention. The lively discussions ranged over specific forms of cooperation (monitoring, research, information exchange, and technology transfers), basic obligations, institutional arrangements and structure, format, and other considerations.

It was clearly evident that further meetings of the Group would be necessary, and the Group therefore requested that the following tasks be undertaken prior to its second\* meeting:

1. Preparation of a new text of a draft framework Convention based *inter alia* on comments and proposals made during the first meeting and dealing with the structure, format, and elements, of the Convention while containing such alternative provisions and commentaries as seemed at all likely to be required.

2. The new draft Convention, together with the report of the first session of the Group, should be sent by UNEP to all member States of the United Nations—along with an invitation to the second session of the Group.

3. The new draft should also be sent to the members of allied bodies—for comments on scientific and technical aspects, and on institutional aspects and machinery for scientific/technical input to the convention. These comments should be returned by a date to be determined by the Secretariat of the Group, located at the WMO headquarters in Geneva, Switzerland.

4. A special paper should be prepared by UNEP on the institutional administration of a convention—in particular on the role and functions of UNEP, should their leadership in the matter be preferred. Financial, logistic, and practical, implications for UNEP should be clarified.

5. A discussion paper on alternative structures and formats for technical annexes and/or protocols should be prepared, indicating the respective implications of each.

6. Provision of a discussion paper on the procedures and limitations of assessing the socio-economic impact of alternative strategies for protection of Man and the environment from adverse effects of depletion of the ozone layer. If it is not possible to introduce this document at a second session of the Group, it should be ready for a subsequent meeting.

7. Provision of a discussion paper on the need for, and difficulties relating to, the transfer, between countries, of technology and knowledge relating to activities concerning production, use, and emissions, which may affect the ozone layer.

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<sup>\*</sup> The dates of this second meeting have now been fixed as 10-18 December 1982, in Geneva, Switzerland.