Forty-fourth session
Item 86 of the provisional agenda*

PROTECTION OF GLOBAL CLIMATE FOR PRESENT AND FUTURE GENERATIONS
OF MANKIND

Report of the Secretary-General

1. INTRODUCTION

1. By its resolution 43/53 of 6 December 1988, the General Assembly recognized that climate change was a common concern of mankind, and determined that necessary and timely action should be taken to deal with climate change within a global framework. The Assembly also endorsed the joint establishment by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) of the Intergovernmental Panel on Climate Change, expressed its appreciation for the work already initiated by the Panel, and called upon all relevant organizations and programmes of the United Nations system to support the work of the Panel.

2. In the same resolution, the General Assembly further considered that activities in support of the World Climate Programme should be accorded high priority by the relevant organs and programmes of the United Nations system. The Assembly also encouraged the convening of conferences on climate change, particularly on global warming, at the national, regional and global levels, and urged Governments, intergovernmental and non-governmental organizations and scientific institutions to treat climate change as a priority issue.

3. In paragraph 10 of the same resolution, the General Assembly requested the Secretary-General of WMO and the Executive Director of UNEP, utilizing the Intergovernmental Panel on Climate Change, immediately to initiate action leading, as soon as possible, to a comprehensive review and recommendations with respect to:

* A/44/150.
(a) The state of knowledge of the science of climate and climatic change;

(b) Programmes and studies on the social and economic impact of climate change, including global warming;

(c) Possible response strategies to delay, limit or mitigate the impact of adverse climate change;

(d) The identification and possible strengthening of relevant existing international legal instruments having a bearing on climate;

(e) Elements for inclusion in a possible future international convention on climate.

4. The General Assembly further requested the Secretary-General, in paragraphs 11 and 12, to bring the resolution to the attention of Governments, intergovernmental and non-governmental organizations and scientific institutions, and to report to the Assembly at its forty-fourth session on the implementation of the resolution.

II. ACTION TAKEN

5. As requested, the Executive Director of UNEP, on behalf of the Secretary-General, in a letter dated 23 March 1989, brought General Assembly resolution 43/53 to the attention of all those mentioned in paragraph 11. A small number of replies have been received to date, mainly from international organizations. They all welcomed the decisions outlined in the resolution, recognizing climate change as a priority issue. They assured the Secretary-General that active support would be given to activities relevant to paragraphs 6 and 9 of the resolution, that due attention would be given in future activities to the problems of global climate and expressed their full support and desire to contribute to the work of the International Panel on Climate Change. A brief review of the current inter-agency activities related to climate is given below.

III. AGENCY AND ORGANIZATION RESPONSIBILITIES

6. Climate has always been a main subject of activities for WMO. Since the establishment in 1873 of the predecessor of WMO - the International Meteorological Organization - the organization always had, as one of its main tasks, the observation and collection of data on climate. The climate programmes of WMO, through its 160 members, are the primary source of the present understanding of climate variability and change. These programmes continue to provide the scientific basis for development of appropriate responses to global climate change. They take maximum advantage of the WMO World Weather Watch system of surface, upper-air and satellite observations, and of extensive activities to assist countries in applying climatic and hydrologic information to many aspects of economic and social activity - agriculture, water management, construction, transportation and energy production and distribution.
7. UNEP gives priority to the issue of a changing atmosphere caused by emissions of radiatively and chemically active substances to the air resulting from industrial and land-use practices by people. Programmes to protect the ozone layer from harm have resulted in the adoption and implementation of international legal instruments to limit emissions of ozone destroying chemicals. As part of the World Climate Impact Studies Programme, UNEP has clarified important aspects of the impact of climate on sensitive sectors of the environment and identified the resultant socio-economic implications. Since 1980, in conjunction with its partners in the World Climate Programme, WMO and the International Council of Scientific Unions (ICSU), regular assessments of the issue of greenhouse gas induced climate change have been made.

8. Among other United Nations specialized agencies, the United Nations Educational, Scientific and Cultural Organization (UNESCO), especially through the International Oceanographic Commission (IOC), has been an active participant in the World Climate Research component of the World Climate Programme; the World Health Organization (WHO) is undertaking a major study of potential impacts of climate change on health and distribution of disease; the Food and Agriculture Organization of the United Nations (FAO) has launched extensive studies of agricultural impacts of climate change; and the International Atomic Energy Agency (IAEA) is studying energy policies and their impact on climate. The United Nations Development Programme (UNDP) and the World Bank are supporting increased efforts in this field.

9. The World Climate Programme has been the main framework for United Nations inter-agency climate activities since the first World Climate Conference, held in 1979. The World Climate Programme has four main components:

   (a) Data: to monitor climatic conditions worldwide;

   (b) Applications: to apply climatic information to improve economic activities and protect the environment;

   (c) Research: to assess the impact of human activities, including greenhouse gases, on climate change and to develop methods to predict monthly and seasonal climatic conditions ("El Niño" phenomena, droughts, etc.);

   (d) Impact studies: to assess the impact of climate variability and change on socio-economic sectors of the environment.

10. WMO is responsible for overall co-ordination of the World Climate Programme and for undertaking the data and applications components. UNEP has the responsibility for implementing the impact studies component. The research component is being jointly co-ordinated by ICSU and WMO, with a strong oceanic component provided by UNESCO/IOC. Among the many other international organizations involved are FAO, the World Energy Council and the Consultative Group on International Agricultural Research.

11. At the highest level, co-ordination of the World Climate Programme is ensured through the meetings of the executive heads of agencies involved. The executive
heads of WMO, UNEP, ICSU, UNESCO and other interested organizations, or their representatives, meet at annual intervals. A number of boards, joint committees and advisory bodies ensure day-to-day co-ordination of activities.

IV. RECENT DEVELOPMENT

1. With the scientific consensus on global warming emerging from the WMO/UNEP/ICSU conference at Villach, Austria, on greenhouse gases and climate change held in October 1985, the governing bodies of UNEP, WMO and other United Nations bodies have requested increasingly vigorous action to develop the basis for appropriate intergovernmental policies and actions.

13. Within WMO there has been a reaffirmation of the agency's responsibility for intergovernmental co-ordination and promotion of scientific measurements, research and assessments on the state of global atmosphere and the climate it produces, in order to provide an authoritative global scientific voice on these matters. The main recent initiatives of WMO have been:

(a) To strengthen the programme for the measurement and reporting of greenhouse gases in the Global Atmospheric Watch by further development of the 20-year-old activities of the Background Air Pollution Monitoring Network and the even older Global Ozone Observing System;

(b) To assist developing countries in measurement and assessment of their own climate trends, through improved climate observation networks, the standard PC-based CLICOM (Climate Computing) system for processing and analysis of the data, and through the DARE (date rescue) project for preserving historical data in usable form. Improved selection, quality control and international exchange of relevant data to assess global trends will be achieved through the Climate Change Detection Project. These require increasing support for technical co-operation projects by UNDP and national donors, and the WMO Executive Council recently established a special fund to support these efforts and the Global Atmospheric Watch, with a target of $22 million for 1990-1991;

(c) Strengthening of the observational and research activities of the World Climate Research Programme, together with the International Council of Scientific Union and UNESCO, has been a further priority. The research is designed to improve the ability to understand and predict, through mathematical models, the behaviour of the climate system and its responses to human activities, especially to increasing concentrations of carbon dioxide and other greenhouse gases;

(d) Planning for the second World Climate Conference (WMO/UNEP/UNESCO/ICSU) to be held at Geneva, from 12 to 21 November 1990, has been proceeding. The emphasis of the Conference will be to review, at ministerial level, response strategies recommended by the Intergovernmental Panel on Climate Change in its first assessment report (August/September 1990) and to review the outcome of the first decade of the World Climate Programme.

Many of the above WMO actions were taken in response to General Assembly resolution 43/53.
14. During the same period, UNEP pursued an increasingly vigorous programme. Prior to the establishment of the World Climate Programme, little attention had been paid to climate impact assessment. UNEP encouraged the development of methods for undertaking such assessments and later, through their application in specific case studies, has better quantified the impacts of climate variability on the environment, particularly on agriculture. The application of climate impact assessment methods in regions prone to devastating drought, as well as contributions to the development of early warning systems, are ways in which UNEP is assisting countries to meet the challenge to their drought-afflicted economies. Similarly, the risks posed by El Niño phenomenon and its influence on world-wide weather are now better understood as a consequence of a UNEP working group's regular review of the issue.

15. The likelihood of climate change caused by emissions of greenhouse gases has provided UNEP with an enormous challenge. It has arranged for several examples of climate impact and assessments of the rise in sea levels to be undertaken and policy responses to be determined. It has pursued a vigorous public awareness campaign on the issue, and, as a preliminary to the outcome of the consideration of climate change of the Intergovernmental Panel on Climate Change, has published a list of response options that Governments might consider in dealing with the effects of climate change.

16. By encouraging the development of national and regional climate impact networks and by providing an international co-ordinating mechanism to support the merging networks, UNEP is currently responding to the growing world-wide interest in climate matters by ensuring that, through effective international communication, climate is better understood, its resource efficiently utilized and its dangers effectively muted.

V. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

17. In November 1988, the Executive Director of UNEP and the Secretary-General of WMO took the necessary steps to create the Intergovernmental Panel on Climate Change, in response to requests of their respective governing bodies. A first progress report on this important body is in the following section.

18. The Panel has met twice since its formation, once at Geneva (9 to 11 November 1988) and once at Nairobi (28 to 30 June 1989). A total of 30 countries were present at the first session and 43 at the second.

19. At its first session, the Panel elected Professor B. Bolin of Sweden, Dr. A. Al-Gain of Saudi Arabia and Dr. J. A. Akejokun of Nigeria as its Chairman, Vice Chairman and Rapporteur, respectively.

20. The Panel agreed that its main task was: (a) to assess the scientific information that is related to the various components of the climate change issue, such as increases of greenhouse gases in the earth's atmosphere and modifications of the earth's radiation balance resulting therefrom, as well as that information needed to enable the environmental socio-economic consequences of climate change to
be evaluated; (b) to evaluate the socio-economic impacts of climate change; and
(c) to formulate realistic response strategies for the management of the climate change issue.

21. To accomplish its task, the Panel set up three working groups:

(a) Working Group I, chaired by the United Kingdom of Great Britain and Northern Ireland, for the assessment of available scientific information on climate change;

(b) Working Group II, chaired by the Union of Soviet Socialist Republics, for the assessment of the environmental and socio-economic impacts of climate change;

(c) Working Group III, chaired by the United States of America, for formulating response strategies.

The Panel also established a bureau for co-ordination of the activities of the working groups.

22. The Panel agreed on the establishment of a trust fund to finance its activities. This trust fund has been established and is administered by the Secretary-General of WMO. The sources of funding of the trust fund are WMO, UNEP and voluntary contributions by member Governments and organizations of the Intergovernmental Panel on Climate Change.

23. At its second session, the Panel concerned about the inadequate participation of developing countries in its activities, established a special committee on matters related to developing countries. This committee will be chaired by France and will consist of five members from the developing countries and five from the developed countries.

24. Following a suggestion of the executive heads of UNEP and WMO, the Panel set a target of $US 1 million for the support of the participation of developing countries in its activities. It also decided that the contributions from member Governments of the Panel made for this specific purpose would be administered separately from other contributions.

25. The target date for completing the first assessment report on the climate change issues is August/early September 1990. The report will consist of (a) the reports of the three working groups, each approximately 200 pages long, (b) 20-page summaries of these reports written in a fashion understandable to the non-specialist and the policy-maker, and (c) 20-page summary integrating the findings and conclusions of the Intergovernmental Panel on Climate Change.

26. At its fifteenth session, held in May 1989, the Governing Council of UNEP considered the work of the Intergovernmental Panel and adopted decision 15/36 on "Global climate change" in which inter alia, it: /...
"...

2. Requests the Executive Director of the United Nations Environment Programme, in full collaboration with the Secretary-General of World Meteorological Organization, to consult with the Intergovernmental Panel on Climate Change with respect to the determination of its internal organization and procedures, its budget and means of financing such budget;

"...

5. Urges the Intergovernmental Panel on Climate Change to take the necessary steps to ensure the scientific and policy participation of developing countries in its work and recommends the international community to provide assistance in this respect;

"...

7. Further notes the intention of the Intergovernmental Panel on Climate Change to adopt an interim report not later than October 1990; 1/

"...

9. Requests the Executive Director of UNEP, in co-operation with the Secretary-General of WMO, to begin preparations for negotiations on a framework convention on climate.

"10. Recommends that such negotiations should be initiated as soon as possible immediately after the adoption of the interim report of the Intergovernmental Panel on Climate Change;

"...

1/ See the report of the Intergovernmental Panel on Climate Change on its first session (World Meteorological Organization and United Nations Environment Programme, World Climate Programme Publications Series, No. IPCC-1/TD-No.267), paras. 3.12 and 4.3.

27. A parallel resolution was adopted in June 1989 by the forty-first meeting of the WMO Executive Council, EC-XLI resolution 4, requesting the Secretary-General to work with the Executive Director of UNEP to initiate intergovernmental negotiations on a framework convention on climate change, following the completion of the Intergovernmental Panel's first assessment report and its recommendations on "elements" of a convention on climate.

28. The two executive heads of UNEP and WMO are setting in formation a small task force of representatives of WMO and UNEP, co-ordinator of the second World Climate Conference and some experts to advise on the actions the two executive heads could take in response to their governing bodies decisions.