WORLD CLIMATE PROGRAMME PUBLICATIONS SERIES

# WMO/UNEP INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

# **REPORT OF THE FIRST SESSION**

# **OF THE**

# **IPCC BUREAU**

Geneva, 6 -7 February 1989

IPCC - 2

TD - No. 294



United Nations Environment Programme



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LIST OF ACRONYMS

### REPORT OF THE FIRST SESSION OF THE IPCC BUREAU

#### 1. ORGANIZATION OF THE SESSION

# 1.1 Opening of the session (agenda item 1)

1.1.1 The first session of the Bureau of the Intergovernmental Panel on Climate Change (IPCC) was called to order at 9.00 a.m. on Monday, 6 February 1989, in Salle I of the WMO Secretariat Building by Prof. B. Bolin, the Chairman of IPCC.

1.1.2 The list of participants is attached as Annex I.

1.1.3 At the Chairman's invitation, both Prof. G.O.P. Obasi, the Secretary-General of WMO and Dr. M.K. Tolba, the Executive Director of UNEP addressed the Bureau.

1.1.4 In his address, Prof. Obasi complimented the IPCC Working Groups on the productive manner in which they had completed their assigned initial tasks (see Annex IV of reference 1).

He reminded the Bureau of Resolution 43/53 of the United Nations General Assembly, "Protection of global climate for present and future generations of mankind". The resolution charges Dr. Tolba and himself to initiate certain activities, through IPCC, in regard to the problem of climate change. He noted that there must be a report through the UN Secretary-General to the General Assembly in the fall of 1989 on the collective progress achieved. He hoped that he could count on IPCC, with its Secretariat, to prepare a first draft of the report, which both UNEP and WMO could augment as required.

He also reminded the Bureau of the continuing interagency co-ordination of the World Climate Programme and informed the Bureau that the sixth meeting of the Executive Heads of agencies on the matter was scheduled for Thursday, 9 February 1989 at the WMO Secretariat.

1.1.5 In his remarks, Dr. Tolba observed that the decisions made in November 1988 in establishing the institutional framework for IPCC appeared to have been the correct ones. Already, they were starting to produce the desired results in a very short space of time. He hailed the presence of all fifteen Member countries of the Bureau as an indicator that the machinery was working.

Dr. Tolba gave credit to Dr. Bolin for his devotion to the work of IPCC and to the Chairmen of the Working Groups and their Governments for facilitating the sessions of the Working Groups, the outcome of whose deliberations was before the Bureau for consideration. He paid glowing tribute to the scientists who are participating in the activities of the Working Groups, adding that their reward was the full knowledge that they were examining a phenomenon of potentially immense consequence for life on this planet. Turning to the problem of inadequate involvement of developing countries in the work of IPCC, Dr. Tolba urged the Bureau to advise and give guidance to the Chairmen of the Working Groups and the IPCC Secretariat so as to enhance the participation of scientists from developing countries in IPCC activities. He noted that the success of IPCC work and the implementation of its results depended critically on the wide involvement of scientists and individuals from as many governments as possible.

Dr. Tolba noted with great appreciation the contributions and pledges by governments to the IPCC Trust Fund. He however, requested the Bureau to address the problem of increased financing to support IPCC activities.

In conclusion, he thanked Professor Obasi, Secretary-General of WMO, for having hosted the first session of the Bureau in the WMO Secretariat and for the excellent arrangements made to facilitate the convening of the session. He hoped to see all those present during June 1989 at the second session of IPCC in Nairobi.

1.1.6 Prof. Bolin, in his opening remarks, reminded the Bureau that the action programme of IPCC should envisage a time span longer than 18 months, that the latter was the period in which IPCC would be focusing on its first assessment report and that such a report should be a concise, readable account of the state-of-the-art of the subject matter covered by the three IPCC Working Groups. He said that the Working Groups, in his reading of their submissions, have set up subgroups to accomplish their tasks and that he considered this to be necessary. The task before the Bureau was to ensure that needed machinery was set up for the writing to begin and for the needed resources for that to be set aside. The task of the Panel in the first 18 months or so, being the meshing of the reports of the Working Groups into a single unit, an overall timetable needed to be agreed upon.

#### 1.2 Approval of the agenda

1.2.1 The provisional agenda was submitted to the Bureau for approval. The Chairman proposed that a discussion on ways and means of promoting the participation of the developing countries in IPCC activities be included under agenda item 5. The IPCC Secretary, then, suggested that (a) the 1992 UN Conference on environment and development, (b) items for the agenda for the planned second session of IPCC (28-30 June 1989, UNEP Headquarters, Nairobi), (c) the progress report to the UN General Assembly in late 1989 and (d) the role of IPCC and its Bureau in promoting public education and awareness on the issue of climate change, be included under agenda item 7. The US delegation proposed that the legal status of IPCC and its relationship to WMO and UNEP be considered also under the same agenda item. The agenda was approved with these additions and is given in Annex II.

#### 1.3 Programme of work of the session

1.3.1 The Bureau agreed upon a programme of work for the session.

## 2. UNGA RESOLUTION 43/53 (agenda item 2)

2.1 The delegation of Malta pointed out that operative paragraphs 10d and 10e of the United Nations General Assembly (UNGA) Resolution 43/53, "Protection of global climate for present and future generations of mankind" (see Annex III) do not appear to have been dealt with by Working Group III. He offered to place before the Bureau an outline of the legal and institutional strategy for the elaboration of an international convention on climate change.

2.2 After considerable discussion, the Bureau agreed that the issue raised by Malta was an important one and that the Steering Group of Working Group III be given the responsibility of dealing with it. The Bureau further agreed that the matter be raised at the second session of IPCC (28-30 June 1989, Nairobi).

3. THE SECOND WORLD CLIMATE CONFERENCE (SWCC) (agenda item 3)

3.1 Mr. J.P. Bruce, Acting Deputy Secretary-General of WMO, informed the Bureau, on behalf of the Advisor on SWCC to the Secretary-General of WMO and the Executive Director of UNEP, that the timing of the Conference could be reconsidered by the Executive Council of WMO at its forty-first session (5-17 June 1989, Geneva). The SWCC Organizing Committee had urged the early appointment of a full-time Co-ordinator for the Conference. Also, available funding was still insufficient to meet all needs.

3.2 The Executive Director of UNEP emphasized the paramount importance of ministerial-level involvement and participation in the Conference so that its objectives may be achieved (see Annex IV for the objectives). The Secretary-General of WMO confirmed that, as a result of recent discussions, the Co-ordinator should be in office by the summer of 1989.

3.3 The Bureau, after some discussion, noted and agreed that the main objectives of SWCC are to present the results of the first ten years of the World Climate Programme and to discuss the first assessment report of IPCC. The latter should be helpful in attracting participation of high level decision-makers and/or policy-makers (e.g. ministers) in the Conference. For this reason, careful consideration should be given to the presentation of the first assessment report of IPCC at the Conference.

4. PLAN OUTLINES OF IPCC WORKING GROUPS (agenda item 4)

## 4.1 <u>Plan outline of WORKING GROUP I on assessment of available scientific</u> information on climate change

4.1.1 The Chairman of <u>Working Group I</u>, Dr. J.T. Houghton presented the plan outline. Fifty scientists from 20 countries had participated in developing the outline.

The Working Group (a) formulated the detailed agenda for its work and (b) compiled a list of potential contributors from which lead authors could be chosen (a list of potential lead authors was made available to the Bureau). The Working Group will summarize past scientific assessments and the research results that have become available since their time. It will pay special attention to the topics of regional distributions of climate change and of extreme events, such as tropical storms. In this regard, it did not foresee initiating new model runs or other new work. The existing model disagreements with respect to regional and smaller scale predictions would be analyzed with a view to clarifying the underlying reasons. Four regions, namely, the monsoon region of S. Asia, the Sahel, the Mediterranean and the Great Plains of N. America, would be chosen initially for such analyses.

4.1.2 Further, the report of the Working Group, as a whole, building as it would on available assessments, would not be expected to exceed about 200 pages, with summaries as appropriate; it would be a scientific document, carefully setting out and dealing with uncertainties, written with a larger readership in mind. There would be a section, to be written by the representatives of the WMO/ICSU Joint Scientific Committee for the World Climate Research Programme and the ICSU International Geosphere-Biosphere Programme, on required future observing systems to monitor climate change and its forcing factors.

4.1.3 Dr. Houghton pointed out the need for strengthening the participation of scientists from the developing countries in both the writing and peer-reviewing phases of the work.

4.1.4 In the course of the discussion, the delegates made the following general points:

- that other regions of the world (e.g., Southern Hemisphere oceans, polar regions, arid regions other than the Sahel) be considered for model intercomparisons and analyses;
- b. that they agreed with the observation of the Chairman of Working Group I that efforts be intensified to encourage the widest possible participation of scientists from developing countries and that such efforts include the holding of seminars and tutorials in a mutually-educational mode.

With regard to the first point, the Bureau agreed that few new model runs would be possible in the time available. For intercomparing available predictions of regional distribution of climate change from different models, the data base would be obtained from the runs of general circulation models and, as such, a large number of regional case studies would be impractical in 18 months. However, it was recommended that the rationale for the initial selection of regions should be set out clearly for the wider audience.

Some simple statistics of averages and associated parameters should be provided for the globe as a whole. But in-depth analysis of the model calculations in respect of uncertainties and their physical or other (e.g., numerical) reasons should be carried out primarily for the selected regions (see para 4.1.1 above); this, then, could serve as the basis for expanding such analysis to more regions of the world.

The second point was discussed in full under agenda item 5.

4.1.5 It was agreed that the report of Working Group I would include recommendations for priority areas for further research.

4.1.6 The section titles, interaction plans of Working Group I with the other two Working Groups and the work plan are attached as Annex V.

4.2 Plan outline of WORKING GROUP II on assessment of environmental and socio-economic impacts of climate change

4.2.1 On behalf of the Chairman of <u>Working Group II</u>, Prof. Ju.A. Izrael, Dr. Khodkin of the USSR State Committee for Hydrometeorology presented the plan outline.

4.2.2 The Working Group decided to focus attention on five broad areas: (1) agriculture, forestry and land use; (2) natural ecosystems; (3) hydrology and water resources; (4) energy, industry, transport, settlements and human health; (5) world oceans, cryosphere and coastal zones.

4.2.3 Subgroups were set up to address each of these areas with designation of co-chairmen/lead authors as follows, in alphabetical order by country:

Area 1 - Dr. S.K. Sinha (India) Dr. M. Parry (UK) Dr. G. Mendzulin (USSR)

- Area 2 Dr. D.K. Dawson (Canada) Dr. S. Semenov (USSR)
- Area 3 Dr. K.-E. Mostefa Kara (Algeria) Dr. R.M. Hirsch (USA) Prof. I.A. Shiklomanov (USSR)
- Area 4 Dr. M. Hashimoto (Japan) Dr. M.A. Starikovich (USSR)
- Area 5 Dr. J.B. Smith (USA) Dr. A.V. Tsiban (USSR)

4.2.4 A Steering Group for overall co-ordination was also set up. It would consult with Working Group I in February 1989 in order to delineate areas of interaction (see also para 4.1.6 above).

4.2.5 In the course of the discussion, section by section, of the plan outline, the Bureau observed that:

- a. positive as well as negative impacts be given attention,
- b. priority be given to those impacts that lend themselves to short-term, cost-effective remedial actions,
- under agriculture, sensitivity to the variability in climate parameters (e.g., precipitation, frost-free periods, duration of sunshine) be particularly emphasized,
- d. in the case of forests, all relevant environmental factors be considered together with climate factors (e.g., forest dieback in eastern North America could be due to climate change, increases in ground-level oxidants and/or acid deposition),
- nomadic/pastoral settlements be included either under land use or under settlements,

- f. arid tropical and polar terrestrial ecosystems be considered under natural terrestrial ecosystems,
- g. extreme events be included for study as one of the components of climate change in the section on natural ecosystems,
- experts from disciplines such as economics, sociology and anthropology be included in the membership of the Working Group,
- population movements in the context of climate change be included either in hydrology and water resources or in the section on settlements,
- j. hydroelectric power generation in the context of climate change be included in the section on energy,
- k. the spread of tropical diseases be included in the section on human health,
- trade implications and consideration of energy-intensive industries be included in the section on energy,
- m. in general, socio-economic impacts be given adequate consideration in addition to environmental impacts.
- 4.2.6 The section titles and the work plan are given in Annex VI.

# 4.3 Plan outline of WORKING GROUP III on formulation of response strategies

4.3.1 The Chairman of <u>Working Group III</u>, Dr. F.M. Bernthal, presented the plan outline. The Working Group had looked at two broad areas of possible response: limitation and adaptation.

Under the limitation response option, two subgroups were set up, one on energy and industry (to include transportation) and another on agriculture, forestry and other sectors. The first would be co-chaired by Japan and either Canada or China and the second by the Federal Republic of Germany and Zimbabwe.

Under adaptation measures, two subgroups were also set up, one on coastal zone management, co-chaired by New Zealand and the Netherlands, and the other on resource use and management, co-chaired by France, India and either Canada or China.

Canada and China would soon decide the subgroup they would co-chair.\*

<sup>\*</sup> Since the Bureau session, it has been agreed that China would be the Co-Chair for the subgroup on energy and industry and Canada would be the Co-Chair for the subgroup on resource use and management.

7.3.2 The Working Group set up a Steering Group for overall co-ordination and direction of the work of the subgroups. It was agreed that the Steering Group would undertake two additional initial tasks: (a) the development of emissions scenarios and (b) the development of a strategy for considering implementation mechanisms, including public education and information, legal instruments and institutional measures, technical assistance and financial and economic measures.

4.3.3 The Working Group structure, the guidelines for the subgroups and the work plan are given in Annex VII.

5. DISCUSSION OF THE WORKING GROUP PLAN OUTLINES (agenda item 5)

#### 5.1 Working Group plan outlines and IPCC first assessment report

5.1.1 The Bureau decided that the final reports of the Working Groups be published in a special series. In order to facilitate ready reference for the readership, the Chairman of IPCC with the assistance of the IPCC Secretariat will formulate a common format.

5.1.2 The Bureau welcomed the proposal of Working Group I to produce a 20-page "policy" document which would summarize the scientific results and place them in perspective. It requested that other Working Groups do the same. The "policy" documents, then, would be integrated into a single IPCC draft document. This would serve as the basis for the final IPCC (first assessment) report. The Chairman will take the responsibility for the IPCC draft document, calling upon such help as he may deem necessary.

5.1.3 The Bureau further decided that the 200-odd page reports that each Working Group would generate in the next 18 months should serve as back-up documents to be available to the public. These may contain appendices. The Bureau, however, expressed the view that the 200-odd pages should incorporate illustrative material as well.

5.1.4 Authorship and credit for other participation (e.g., peer review) would be acknowledged by appending lists of participants which may include indications of specific chapters/sections to which the expert contributed.

5.1.5 The Bureau agreed upon the following timetable for the preparation of the first assessment report by IPCC.

January - March 1990 - Draft reports including 20-page summaries to be completed by the Working Groups.

Peer review process to proceed.

June - August 1990

- Concurrent activity for the Working Groups and IPCC Chairman.

Finalization of the reports, including the 20-page summaries, of the Working Groups and approval by each Working Group of its report.

The drafts to be sent to the Chairman of IPCC for integration into the draft IPCC first assessment report.

(Close co-ordination between the IPCC Chairman and the Chairmen of the Working Groups essential during this phase.)

August 1990 - Completion of the draft IPCC first assessment report for submission to IPCC for approval.

The Working Groups should tailor their work plans accordingly and should distribute them to all members of IPCC and to the IPCC Secretariat.

### 5.2 Promoting participation of experts from developing countries

5.2.1 With regard to the participation of experts from the developing world, the Bureau, in the strongest terms, urged promotion of such participation. This was necessary for the mutual benefit of the developing as well as the developed countries. (See also paras. 4.1.3 and 4.1.4 above).

5.2.2 Prof. Obasi pointed out that a major impediment to full participation by developing countries was lack of financial resources, and not a lack of either understanding or appreciation of the seriousness of the climate change issue.

5.2.3 Canada and the Netherlands announced that they would provide support to a representative each from the Caribbean region and Indonesia, respectively, for participation in IPCC activities. The Co-Chairs of Working Group III have been urged to promote the participation of experts of their members from the developing world. The representative of UNEP pointed out that, in the activities associated with Working Group III, for example, a group of experts from a developing country may have to be supported in view of the broad range of issues involved, rather than a single expert.

5.2.4 The Chairman requested Saudi Arabia, Brazil, Senegal and Zimbabwe, with assistance from WMO and UNEP, to prepare a 10-page document on ways to increase the participation of experts from the developing world, for consideration by IPCC at its next session. This effort would be chaired by Saudi Arabia and the document could serve as a basis for action by the Executive Heads of WMO and UNEP.

5.2.5 The Bureau urged the Executive Heads of WMO and UNEP to increase their efforts in obtaining funds from the World Bank, the United Nations Development Programme, the Islamic Development Bank and other multilateral financial institutions for the promotion of the participation of experts from the developing world in IPCC activities.

6. IPCC BUDGET AND OTHER SUPPORT (agenda item 6)

6.1 The Bureau noted the IPCC budget requests for 1989 and 1990 and expressed the view that they were reasonable.

6.2 Saudi Arabia announced that it would contribute to the WMO/UNEP IPCC Trust Fund, the amount to be communicated later. The US delegation clarified the use of its \$50,000 contribution to the Fund stating that its contribution could be used for IPCC Secretariat expenses and for supporting invited (individual) experts to the meetings of the Working Groups or their subgroups. It also announced an additional pledge of \$10,000 earmarked for the participation of experts from developing countries in the activities of Working Group III. (See also para 5.2.3 above).

OTHER MATTERS (agenda item 7)

# 7.1 1992 UN Conference on environment and development

7.1.1 The Bureau decided that the Working Groups should consider including activities in their work plans for the period between the completion of the IPCC first assessment report and the 1992 Conference, since the Conference could provide an opportunity for further consideration of IPCC recommendations.

#### 7.2 Agenda for the second session of IPCC

7.2.1 The Bureau agreed that the following items, inter alia, should be on the agenda for the second session of IPCC (June 1989, Nairobi): (a) discussion on ways to promote developing country participation in IPCC activities, (b) emissions scenarios, (c) updates from Working Groups, especially on co-ordination interactions among them, and (d) progress towards first assessment (1990) report of IPCC.

### 7.3 Progress report to UNGA in 1989

7.3.1 The Bureau decided that this report should be of an interim nature and need to deal only with administrative and similar matters without including any details of the results of Working Group deliberations. The Chairman, with the assistance of IPCC Secretariat, was given the responsibility for preparing the draft report to go to the Executive Director of UNEP and the Secretary-General of WMO.

# 7.4 Public awareness

7.4.1 The Bureau resolved that IPCC Secretariat prepare and disseminate an IPCC Newsletter to promote public awareness of the work of the Panel. The widest possible readership should be targeted. This activity should begin at once.

# 7.5 Legal status of IPCC and its relationship to WMO and UNEP

7.5.1 The US delegation presented its views on the matter. IPCC Bureau decided that the question was one for the consideration of the Panel and the Governing Bodies of WMO and UNEP.

8. DATE AND PLACE OF THE NEXT SESSION (agenda item 8)

8.1 IPCC Bureau agreed to meet in its second session in Geneva from 30 January to 1 February 1990, with the understanding that, should it be necessary, the session would continue for another day.

9. ADOPTION OF THE REPORT OF THE SESSION (agenda item 9)

9.1 IPCC Bureau adopted the report of the session, as amended by it. The IPCC Secretariat was charged with the final editing of the report, subject to approval by IPCC Chairman.

10. CLOSURE OF THE SESSION (agenda item 10)

10.1 This session of the IPCC Bureau closed at 3.40 p.m. on Tuesday, 7 February 1989.

Reference: (1) IPCC-1, Report of the first session of the WMO/UNEP Intergovernmental Panel on Climate Change (IPCC), Geneva, 9-11 November 1988, TD-No. 267, World Meteorological Organization, Geneva, 1988.

# LIST OF ATTENDEES

Prof. B. Bolin, Chairman/IPCC 1. Dr. A. Algain, Vice-chairman/IPCC 2. Dr. J. A. Adejokun, Rapporteur/IPCC 3. Ms. C. Bee AUSTRALIA 4. Mr. B. Jones Mr. M. P. F. Smith Dr. A. D. Moura 5. BRAZIL Mr. W. P. Moreira Mr. H. L. Ferguson б. CANADA Mr. J. A. Beesley Mr. J. G. Coté 7. CHINA Dr. Zou Jingmeng Mr. Jin Kui Dr. M. Hashimoto 8. JAPAN Mr. J. Oyabu Prof. D. Attard 9. MALTA Mr. H. Taylor-East Prof. C. J. E. Schuurmans 10. NETHERLANDS Dr. P. Vellinga 11. SENEGAL Dr. M. Seck 12. UNITED KINGDOM Dr. J. T. Houghton Ms. S. Mann Dr. A. Metalnikov 13. USSR Dr. S. Khodkin Dr. B. V. Smirnov 14. USA Dr. F. Bernthal Dr. W. Nitze Ms. L. Fisher Dr. E. W. Friday Dr. J. Clarke Dr. A. Hecht Dr. D. Johnsen 15. ZIMBABWE Mrs. R. Karimanzira

UNEP

Dr. M. K. Tolba, Executive Director Mr. P. Usher

WMO

Prof. G. O. P. Obasi, Secretary-General Mr. J. P. Bruce Dr. V. G. Boldirev Mrs. M. Stanojevic

Dr. N. Sundararaman Mr. S. Tewungwa Mrs. R. J. Bourgeois

ICSU Observer

**IPCC** Secretariat

Dr. F. W. G. Baker

### PROVISIONAL AGENDA

- 1. ORGANIZATION OF THE SESSION
  - 1.1 Opening of the the session
  - 1.2 Approval of the agenda (Doc. 1 and Doc. 2)
  - 1.3 Programme of work of the session
- UNGA RESOLUTION 43/53 (INF. 1)
- 3. THE SECOND WORLD CLIMATE CONFERENCE
- 4. PLAN OUTLINES OF IPCC WORKING GROUPS (INF. 2, INF. 3, and INF. 4)
  - 4.1. Plan outline of Working Group I on assessment of available scientific information on climate change;
  - 4.2 Plan outline of Working Group II on assessment of
  - environmental and socio-economic impacts of climate change;
    4.3 Plan outline of Working Group III on formulation of response strategies.
- 5. DISCUSSION OF THE WORKING GROUP PLAN OUTLINES
  - 5.1 Working Group plan outlines
  - 5.2 Promoting participation of the developing countries
- 6. IPCC BUDGET AND OTHER SUPPORT (Doc. 3)
- 7. OTHER MATTERS
  - 7.1 1992 UN Conference on environment and development
  - 7.2 Items for the agenda of the Second Session of IPCC
  - 7.3 Progress report to the UN General Assembly in 1989
  - 7.4 Promoting public attention and awareness about IPCC
  - 7.5 Legal status of IPCC
- 8. DATE AND PLACE OF NEXT BUREAU SESSION
- 9. ADOPTION OF THE REPORT OF THE SESSION
- 10. CLOSURE OF THE SESSION

# UNITED NATIONS



# **General Assembly**

Distr. GENERAL

A/RES/43/53 27 January 1989

Forty-third session Agenda item 148

#### RESOLUTION ADOPTED BY THE GENERAL ASSEMBLY

[on the report of the Second Committee (A/43/905)]

### 43/53. Protection of global climate for present and future generations of mankind

The General Assembly,

<u>Welcoming with appreciation</u> the initiative taken by the Government of Malta in proposing for consideration by the Assembly the item entitled "Conservation of climate as part of the common heritage of mankind",

<u>Concerned</u> that certain human activities could change global climate patterns, threatening present and future generations with potentially severe economic and social consequences,

Noting with concern that the emerging evidence indicates that continued growth in atmospheric concentrations of "greenhouse" gases could produce global warming with an eventual rise in sea levels, the effects of which could be disastrous for mankind if timely steps are not taken at all levels,

Recognizing the need for additional research and scientific studies into all sources and causes of climate change,

Concerned also that emissions of certain substances are depleting the ozone layer and thereby exposing the earth's surface to increased ultra-violet radiation, which may pose a threat to, <u>inter alia</u>, human health, agricultural productivity and animal and marine life, and reaffirming in this context the appeal, contained in its resolution 42/182 of 11 December 1987, to all States that have not yet done so to consider becoming parties to the Vienna Convention for the Protection of the Ozone Layer, adopted on 22 March 1985, and the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted on 16 September 1987, as soon as possible. A/RES/43/53 Page 2

<u>Recalling</u> its resolutions 42/186 and 42/187 of 11 December 1987 on the Environmental Perspective to the Year 2000 and Beyond and on the report of the World Commission on Environment and Development, respectively,

Convinced that changes in climate have an impact on development,

<u>Aware</u> that a considerable amount of valuable work, particularly at the scientific level and in the legal field, has already been initiated on climate change, in particular by the United Nations Environment Programme, the World Meteorological Organization and the International Council of Scientific Unions and under the auspices of individual States,

Welcoming the convening in 1990 of a second World Climate Conference,

<u>Recalling also</u> the conclusions of the meeting held at Villach, Austria, in 1985, <u>1</u>/ which, <u>inter alia</u>, recommended a programme on climate change to be promoted by Governments and the scientific community with the collaboration of the World Meteorological Organization, the United Nations Environment Programme and the International Council of Scientific Unions,

<u>Convinced</u> that climate change affects humanity as a whole and should be confronted within a global framework so as to take into account the vital interests of all mankind,

1. <u>Recognizes</u> that climate change is a common concern of mankind, since climate is an essential condition which sustains life on earth;

2. <u>Determines</u> that necessary and timely action should be taken to deal with climate change within a global framework;

3. <u>Reaffirms</u> its resolution 42/184 of 11 December 1987, in which, <u>inter alia</u>, it agreed with the Governing Council of the United Nations Environment Programme that the Programme should attach importance to the problem of global climate change and that the Executive Director of the United Nations Environment Programme should ensure that the Programme co-operates closely with the World Meteorological Organization and the International Council of Scientific Unic.s and maintains an active, influential role in the World Climate Programme;

4. <u>Considers</u> that activities in support of the World Climate Programme, approved by the Congress and Executive Council of the World Meteorological Organization and elaborated in the system-wide medium-term environment programme for the period 1990-1995, which was approved by the Governing Council of the United Nations Environment Programme, <u>2</u>/ be accorded high priority by the relevant organs and programmes of the United Nations system;

1/ See United Nations Environment Programme, Annual Report of the Executive Director, 1985 (UNEP/GC.14/2), chap. IV, paras. 138-140.

2/ See Official Records of the General Assembly, Forty-third Session, Supplement No. 25 (A/43/25), annex, decision SS.I/3. 5. Endorses the action of the World Meteorological Organization and the United Nations Environment Programme in jointly establishing an Intergovernmental Panel on Climate Change to provide internationally co-ordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies, and expresses appreciation for the work already initiated by the Panel;

6. Urges Governments, intergovernmental and non-governmental organizations and scientific institutions to treat climate change as a priority issue, to undertake and promote specific, co-operative action-oriented programmes and research so as to increase understanding on all sources and causes of climate change, including its regional aspects and specific time-frames as well as the cause and effect relationship of human activities and climate, and to contribute, as appropriate, with human and financial resources to efforts to protect the global climate;

7. <u>Calls upon</u> all relevant organizations and programmes of the United Nations system to support the work of the Intergovernmental Panel on Climate Change;

8. Encourages the convening of conferences on climate change, particularly on global warming, at the national, regional and global levels in order to make the international community better aware of the importance of dealing effectively and in a timely manner with all aspects of climate change resulting from certain human activities;

9. <u>Calls upon</u> Governments and intergovernmental organizations to collaborate in making every effort to prevent detrimental effects on climate and activities which affect the ecological balance, and also calls upon non-governmental organizations, industry and other productive sectors to play their due role;

10. <u>Requests</u> the Secretary-General of the World Meteorological Organization and the Executive Director of the United Nations Environment Programme, through 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) 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;

(<u>c</u>) 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;

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11. <u>Also requests</u> the Secretary-General to bring the present resolution to the attention of all Governments, as well as intergovernmental organizations, non-governmental organizations in consultative status with the Economic and Social Council and well-established scientific institutions with expertise in matters concerning climate;

12. <u>Further requests</u> the Secretary-General to report to the General Assembly at its forty-fourth session on the implementation of the present resolution;

13. <u>Decides</u> to include this question in the provisional agenda of its forty-fourth session, without prejudice to the application of the principle of biennialization.

70th plenary meeting 6 December 1988 Excerpt from the General Summary of the Abridged Report with Resolutions of the Fortieth Session of the Executive Council, 7-16 June 1988, Geneva, on the Second World Climate Conference

The Second\_World\_Climate\_Conference

4.1.9 The Council noted the results of the activities of the Organizing Committee for the Second World Climate Conference, and agreed that the purposes of the conference should be as formulated by the Committee:

- To create an awareness, through specific case studies or examples drawn from experience in the World Climate Programme, of the economic impact of climate and benefits from climate applications;
- (b) To assess the current state of knowledge on the global issues of climate change and greenhouse gases (GHGs), requirements for scientific activity and implications for public policy.

The Committee considered that these purposes complied with the guidance given by Tenth Congress and EC-XXXIX.

4.1.10 The Council supported the outline of the Conference Programme suggested by the Organizing Committee, predicated on an eight day conference:

- I. Opening ceremony
- II. Climate and Environment Past, Present and Future -Scientific Aspects
- III. Applications and Economic Benefits of Climate Information including Short-term Impacts
- IV-V. Consequences of Future Climate Change and Response Strategies
- VI. Discussion of the Conference Statement
- VII. Concluding session.

The Council urged the Organizing Committee to proceed with the identification of speakers and discussions so that a detailed programme could be prepared by the end of 1988.

4.1.11 The Council endorsed the suggestion of the Organizing Committee that the theme title of the conference should be "Climate Change and the Modern World". The recommendation of the Committee to hold the conference immediately after EC-XLII was also endorsed.

4.1.12 It was stressed that the opening of the conference was important and could be used to set the stage through substantial inaugural addresses by public leaders and, for instance, by the President and the Secretary-General of WMO, the Executive Director of UNEP and the President of ICSU. The need to conclude the conference with a statement was emphasized and it was suggested that a framework for such a statement should be circulated to Members of WMO and organizations as appropriate well before the conference to help facilitate the preparation of a final conference statement.

# ANNEX IV, p. 2

4.1.13 The Council noted with appreciation the involvement of several technical commissions in the preparatory work for the conference and considered that this involvement was essential for making full use of the outcome of the WMO scientific and technical programmes.

4.1.14 The Council supported in general the views of the Organizing Committee regarding the involvement of governments in the conference and authorized the Secretary-General to make necessary consultations so that optimal procedures for such an involvement would be found.

4.1.15 The Council agreed with the Organizing Committee in that an urgent establishment of the conference Secretariat would be essential for the success of the conference. The Council requested the Secretary-General, in co-operation with Executive Heads of other agencies, especially UNEP and ICSU, to take necessary actions as soon as possible. Once the necessary personnel have been selected, it is anticipated that funding will be forthcoming from countries and agencies that have a significant involvement in climate change.

4.1.16 The Council noted with satisfaction the continuing interest of various international organizations in the Second World Climate Conference, e.g. Unesco and IOC, and national agencies, and recommended that participation of international organizations wishing to support the conference should be ensured, in particular by inviting them to participate in the Organizing Committee for the conference. It was also agreed that these organizations should be formally approached to identify their support to the conference.

4.1.17 The Council noted that an International Conference on "The Changing Atmosphere", sponsored by Canada and supported by WMO, UNEP and other international organizations, was to be held in Toronto from 27 to 30 June 1988. The Council further noted with satisfaction that the Toronto Conference was designed in such a way that many of its outputs would be useful in the organization of the Second World Climate Conference.

4.1.18 The Council was of the opinion that, during the preparatory phase for the Second World Climate Conference, due attention should be paid to encouraging and, possibly, supporting relevant regional activities including holding regional meetings. The Council recalled that the First Climate Conference was successfully followed by Regional Climate Conferences and considered that that experience might be used after the Second World Climate Conference. REPORT SUMMARY OF WORKING GROUP I ON ASSESSMENT OF AVAILABLE SCIENTIFIC INFORMATION ON CLIMATE CHANGE

It should be noted that this is a quick-reference guide to the programme of Working Group I. For details, the reader is referred to the full report, which is available from either the IPCC Secretariat or Dr. G. J. Jenkins. The respective addresses are:

- a. IPCC Secretary World Meteorological Organization P.O. Box 2300 <u>CH-1211 Geneva 2</u> SWITZERLAND
- b. Dr. G. J. Jenkins Meteorological Office London Road <u>Bracknell</u> Berkshire RG12 2SZ UNITED KINGDOM

### 1. SECTION TITLES

Section 1 - Changes in climate forcing factors.

- Greenhouse gases flux measurements, chemistry, atmospheric abundances, trends.
- Tropospheric and stratospheric aerosols.
- Solar irradiance.
- Land cover/albedo.

Section 2 - Relative importance of agents.

- Using simple radiative transfer model, to estimate relative direct response of climate and its rate of change to each greenhouse gas separately and in combination.
- Review solar and aerosol influences.

Section 3 - Climate changes and variability.

 Review present and past climate and specify future needs for climate monitoring.

Section 4 - Processes and modelling.

Background on modelling climate change.

Section 5 - Model simulations of past and present climate.

Section 6 - Model predictions of climate change and their uncertainties.

Section 7 - Sea level rise.

- Instrumental record, explanation of past record, present state of balance, future level, uncertainties.
- Section 8 Ecosystem dynamics and interactions with the atmosphere.
  - Primary consequences of interactions of climate, land use and ocean ecosystem change.
  - Direct feedback between ecosystem processes and atmosphere.

Section 9 - Future long-term research and monitoring strategies.

II. WORK PLAN

External meetings	1989	WGI activities & milestones
AMS, Anaheim	JAN	First meeting WGI. Outline defined, contributors identified.
IIASA, Vienna	FEB	Modellers meeting, preliminary scenarios definition. First chapter meetings.
	MAR	Data meeting.
	APR	
USDOE, Amherst	MAY	
	JUN	
	JUL	Modellers workshop
IAMAP, Reading	AUG	
IAMAP, Hamburg	SEP	
WMO, Hinterzarten	OCT	"New work" contribution from modellers group and data group.
	NOV	
	DEC	First draft to IPCC, WGI and peer reviewers

External meetings	1990	WGI activities & milestones
	JAN	
	FEB	Comments received from IPCC, peer reviewers.
	MAR	Executive summary drafted.
	APR	Meeting of WGI and lead authors.
	MAY	
	JUN	
	JUL	Report to SWCC.
	AUG	
	SEP	IPCC receive final report.
	OCT	
2	NOV	UN General Assembly
	DEC	

# III. INTERACTION WITH WORKING GROUPS II and III

## (a) Interaction with IPCC Working Group II

1. On the short timescale of the IPCC (first) assessment of climate change and sea level rise, it is unlikely that any significantly improved scenarios could be produced in time to be of use to Working Group II.

2. There are already a number of climate change scenarios available to Working Group II which could be used for impact studies. Working Group I can provide assistance to WGII on the suitability of available model scenarios.

3. On a slightly longer timescale, WCRP-WGNE will be providing climate change scenarios to UNEP for impact studies.

4. WGI will also be available to supply information on the effects of CO<sub>2</sub> and climate change on ecosystems.

5. In the area of sea level rise, there have been a number of assessments, the most recent of which is that given at the WMO/UNEP Bellagio meeting. Again WGI, is available for assistance concerning the suitability of available sea level rise scenarios.

6. These proposals were conveyed to the Moscow meeting of WGII (2-3 February 1989) by the UK delegate, and were also discussed at the IPCC Bureau meeting on 6 February 1989.

## b. Interaction with IPCC Working Group III

Working Group I requests the following information from WGIII:

Projections of:

CO2 man-made emissions: 3 scenarios only

 a. fossil fuel
 b. deforestation (gigatonnes/year)

For methane:

a. Population

b. Rice production (by region)

c. Cattle population

d. Landfill and fossil fuel extraction

N<sub>2</sub>O emissions:

a. Fertilizer usageb. Energy production by type of combustion system

Emissions of CFCs and replacements

5. CO and NO<sub>x</sub> emissions

These requirements were conveyed to the Washington meeting of WGIII (30/31 January 1989) by the UK delegate and were also discussed at the IPCC Bureau meeting on 6 February 1989.

REPORT SUMMARY OF WORKING GROUP II ON ASSESSMENT OF ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS OF CLIMATE CHANGE

It should be noted that this is a quick-reference guide to the programme of Working Group II. For details, the reader is referred to the full report, which is available from either the IPCC Secretariat or Dr. S. Khodkin. The respective addresses are:

 a. IPCC Secretary World Meteorological Organization P.O. Box 2300 <u>CH-1211 Geneva 2</u> SWITZERLAND

b. Dr. S. Khodkin USSR State Committee for Hydrometeorology 12, Pavlik Morozov Street <u>123376 Moscow D-376</u> USSR

# 1. SECTION TITLES

Section 1 - Agriculture, forestry and land use.

- Potential impacts of climate change on these sectors.
  - Their critical sensitivities to specific parameters of climate.
- Section 2 Natural ecosystems.
  - Current knowledge of impacts of climate change on natural ecosystems and their socio-economic significance.

Section 3 - Hydrology and water resources.

- Potential changes in the hydrological regime and in the supply and demand of water due to climate change in different physio-geographic conditions.
- Section 4 Energy, industry, transport, settlements and health.
  - Impacts of climate change.
- Section 5 World oceans, cryosphere and coastal zones.
  - Socio-economic impacts of sea level rise.

Attention will be given to priorities for future work.

Milestones	Dates
Identification of members and co-chairs responsible for preparation of report sections at WGII meeting	2-3 February, 1989 (Moscow)
Task distribution among authors for contributions to sections	February/April, 1989
Meeting of responsible members and co-chairs convened by WGII Chairman	May 1989, USSR
Second session of the Intergovernmental Panel on Climate Change	28-30 June 1989, Nairobi
First version of report sections of WGII	November, 1989
Draft report of WGII to all contributors of WGII for review.	December 1989
Comments received	15 February 1990
Revised version of report sections of WGII	March 1990
Revised version sent to all contributors of WGII	April 1990
Second session of WGII	May 1990, USSR

REPORT SUMMARY OF WORKING GROUP III ON FORMULATION OF RESPONSE STRATEGIES

It should be noted that this is a quick-reference guide to the programme of Working Group III. For details, the reader is referred to the full report, which is available from either the IPCC Secretariat or Mr. A. Sens. The respective addresses are:

- a. IPCC Secretary World Meteorological Organization P.O. Box 2300 <u>CH-1211 Geneva 2</u> SWITZERLAND
- b. Mr. A. Sens Director Office of Environmental Protection Department of State <u>Washington</u>, D.C. 20520 USA

# I. <u>STRUCTURE FOR CONDUCTING THE WORK OF THE WORKING GROUP (ALSO REFERRED</u> TO AS WORKING GROUP ON RESPONSE STRATEGIES OR RSWG)

IPCC Working Group III on response strategies should rely on:

IPCC WGI to provide the scientific basis for the analysis, and IPCC WGII to describe the likely impacts of climate change.

Present knowledge about possible ongoing and future climate changes on global, and certainly on regional and local, scale are uncertain and precise strategy options on a national level can only be developed gradually. In order to progress optimally WGIII should distinguish between

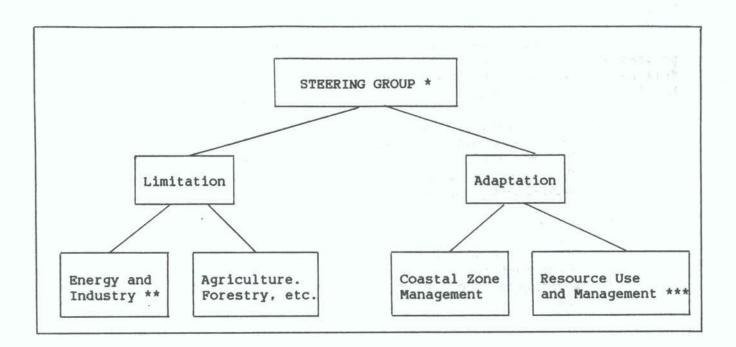
> (a) a short term (18 months) work plan which will be general and preliminary in several regards, but which should be specific in a few priority areas and delineate future options in broad terms,

and

(b) an intermediate and long term work plan, which will provide for collection and analysis of sufficient data to evaluate possible response options and provide a useful information base as climatic changes occur.

Goals for the Working Group

- Define policy options for national, regional and international actions, including proposals for short term actions.
- Provide estimates of consequences, costs and benefits.
- Set priorities.
- Define implementation mechanisms and in so doing analyze carefully the implication for nations in different states of development.



- \* Initial tasks:
  - a. Base emissions forecasts, taking into account population and economic growth in different regions
  - b. Implementation mechanisms
- \*\* Including transportation
- \*\*\* Including unmanaged ecosystems.

### III. GUIDELINES TO SUBGROUPS

- Recognition of the different economic and geographic circumstances of nations (e.g., developed, developing).
- Cost-effective options, including quantitative and qualitative evaluation of social, environmental and economic benefits.
- Definition of priority short- to medium-term options (including non-climate actions that can help) and long-term options.
- Use of available information and work done elsewhere.
- Institutional and attitudinal impediments to implementation.
- Activities structured at national, regional and international levels, e.g.:

<u>National</u>: List of actions individual nations can address, information exchange. <u>Regional</u>: Regional conferences (e.g., Pacific island states). <u>International</u>: Energy R&D Energy efficiency Assistance to developing countries.

#### IV. RESOURCES

It is important to acquire the necessary resources to get work going during the periods between RSWG meetings.

- Nations, regional economic integration organizations, and intergovernmental organizations will be asked to second experts and other resources to make it possible to organize working parties which will provide the input to further RSWG meetings.
- Non-governmental organizations will be invited when appropriate, to contribute to the work on specific tasks as defined by the RSWG.

#### V. \_\_\_\_\_SUMMARY OF SHORT TERM WORK PLAN FOR THE WORKING GROUP AS A WHOLE

- Develop and distribute preliminary emissions scenarios.
- 2. Refine strategy for considering implementation mechanisms.
- Carry out short term (18 months) work plans of four subgroups, including preparation of more detailed work plans and reports on national activities and short term measures.
- 4. Prepare initial reports of subgroups and integrate those reports into a report of the Working Group as a whole.
- As part of (4) above, develop longer term work plans for subgroups and the Working Group as a whole.

## LIST OF ACRONYMS

AMS	American Meteorological Society
CAS	WMO Commission for Atmospheric Sciences
IAMAP	International Association of Meteorology and Atmospheric Physics
ICSU	International Council of Scientific Unions
IGBP	ICSU International Geosphere-Biosphere Programme.
IIASA	International Institute of Applied Systems Analysis
JSC	WMO/ICSU Joint Scientific Committee for the World Climate Research Programme
SWCC	Second World Climate Conference
UK .	United Kingdom
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
USA	United States of America
USDOE	Department of Energy of the Government of the United States of America
USSR	Union of Soviet Socialist Republics
WCRP	World Climate Research Programme
WGNE	Joint JSC/CAS Working Group on Numerical Experimentation
WMO	World Meteorological Organization