

CLIMATE CHANGE:

The 1990 and 1992 IPCC Assessments

IPCC First Assessment Report
Overview and Policymaker Summaries
and
1992 IPCC Supplement

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Climate Change: The IPCC 1990 and 1992 Assessments

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Cover Photographs

Top Image

A composite colour image of GOES satellite using visible and infrared channels. This image was produced by the Data Integration Division, Climate Adaptation Branch, Canadian Climate Centre.

Middle Image

A full global disc satellite image (Channel Visible 2) for 4 September 1983 reproduced with the permission of EUMETSAT.

Bottom Image

A full earth disc view of cloud patterns over the Australian region on 19 February 1991 from the Japanese Geostationary Satellite (GMS4). This image is a colour enhanced composite of information from the visible and infrared channels produced by the Australian Centre for Remote Sensing of the Australian Survey and Land Information Group.

**Notes*

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PREFACE

With the formation of the World Climate Programme after the 1979 World Climate Conference, the World Meteorological Organization and the United Nations Environment Programme – together with the International Council of Scientific Unions – signalled their determination to pursue climate and climate change studies. Their joint efforts reached a decision stage at the International Conference on the Assessment of the Role of Carbon Dioxide and of Other Greenhouse Gases in Climate Variations and Associated Impacts (Villach, Austria, 1985); the findings of the Conference and subsequent meetings on the subject laid the foundation for the current international activities on global warming. A major contributor to the activities is the Intergovernmental Panel on Climate Change (IPCC), jointly established by our two organizations in 1988 under the Chairmanship of Professor Bert Bolin.

The Panel formed three Working Groups

- (a) to assess available scientific information on climate change (Working Group I),
- (b) to assess environmental and socio-economic impacts of climate change (Working Group II), and
- (c) to formulate response strategies (Working Group III)

and a Special Committee on the Participation of Developing Countries to promote the participation of those countries in its activities.

The IPCC First Assessment Report was completed in August 1990 and consists of: the Overview, the IPCC Scientific Assessment, the IPCC Impacts Assessment, the IPCC Response Strategies (the last three including the respective Policymaker Summaries) and the Policymaker Summary of the IPCC Special Committee. The Report has now become a standard work of reference, widely used by policymakers, scientists and other experts and represents a remarkable co-ordinated effort by hundreds of specialists from all over the world.

Anticipating a continuing need for the most current information on climate change in the context of the ongoing negotiations on the Framework Convention on Climate Change and the United Nations Conference on Environment and Development (Rio de Janeiro, June 1992), and as mandated by the governing bodies of our two organizations, the IPCC requested its three Working Groups in March 1991 to produce updates of their 1990 reports. The result is the 1992 IPCC Supplement which was completed in February 1992. This volume contains the Supplement and the 1990 Overview and Policymaker Summaries.

Success in producing the Supplement has depended as in the past upon the whole-hearted enthusiasm and dedicated hard work of scientists and other experts worldwide. We admire, applaud and are very grateful for their commitment to the IPCC process. We take this opportunity to express our gratitude to Prof. Bolin for his exemplary leadership of the IPCC. We congratulate the Chairmen of the three IPCC Working Groups, Sir John Houghton (Working Group I), Prof. Yuri A. Izrael (Working Group II) and Mr. Robert A. Reinstein (Working Group III) for a job well done.

We thank the consortium of 11 States that contributed financially towards this publication.

G.O.P. Obasi
Secretary-General
World Meteorological
Organization

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Executive Director
United Nations Environment
Programme

FOREWORD

The Intergovernmental Panel on Climate Change (IPCC), which I have been privileged to chair since its inception, completed a comprehensive assessment of the climate change issue in 1990 and an update to that assessment in February 1992. The Panel is going on to make another comprehensive assessment, as mandated by its sponsoring bodies (the World Meteorological Organization and the United Nations Environment Programme), by the middle of the 1990s.

The Supplement is an update of key issues addressed in the 1990 IPCC assessment. Six tasks were chosen by the IPCC in March 1991 for inclusion in the Supplement, after taking into account views expressed by a number of nations during the first session of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (INC).

It has become clear in the course of the past year that common or consistent methodologies in a number of subject areas of climate change are of critical importance for uniform application by countries so as to enable intercomparisons among them. Some examples are methodology for assessing national net emissions of greenhouse gases, methodology for national environmental impacts assessments and methodology for assessing national vulnerability to sea level rise. Development of methodologies has been initiated and more will be given high priority in the next few years.

It is well known that there are a number of uncertainties in the IPCC estimates of climate warming. The Panel has neither hidden nor ignored them. It has made every effort – and will continue to do so – to assess both their qualitative and quantitative nature. In this effort, the IPCC welcomes critical examinations of its conclusions by all who are interested in the issue, and invites the active participation of all the scientists and other experts who may disagree with its findings and the presentation in detail of their scientific analyses of alternative points of view.

The completion of the 1990 assessment and the 1992 Supplement would not at all have been possible without the impressive amount of work put in by a large number of scientists and other experts from many parts of the world, including developing nations. I take this opportunity to thank each and everyone of them. I hope that they found the experience stimulating – albeit perhaps a little exhausting – and that in the future they would find it worthwhile to continue to contribute to the work of the IPCC.

I am particularly grateful to the Chairmen of the three IPCC Working Groups and the Special Committee on the Participation of Developing Countries, their Vice-Chairs, Co-Chairs of the subgroups and lead authors. The credit for the successful accomplishment of each IPCC effort belongs very much to them.

I am also grateful for the support provided by the two Executive Heads of the sponsoring organizations and to the Governments who have given support in spirit as well as in cash and kind.

Finally, I wish to extend my thanks to Mr. N. Sundararaman, the Secretary of IPCC, Mr. S. Tewungwa and the staff of the IPCC Secretariat whose commitment greatly facilitated the timely completion of the tasks of the IPCC.

B. Bolin
Chairman,
Intergovernmental Panel on Climate Change

