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The Global 2000 Report to the President of the U.S.

Entering the 21st Century Volume I: The Summary Report

**Special Edition with the
Environment Projections and
the Government's Global Model**

Gerald O. Barney
Study Director

**A Report Prepared by the Council on Environmental
Quality and the Department of State**

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PREFACE

When Pergamon Press decided to publish this special edition of materials from the Global 2000 Study, I was delighted to be asked to write the Preface. The Preface provides an opportunity to explain the background, evolution, and structure of this study more fully than has been done to date. It also provides an opportunity, in a few pages, to answer some of the questions that have been asked most often since the Global 2000 Report's release.

The Global 2000 Study was shaped by a very brief directive in President Carter's May 23, 1977 Environmental Message:

"... I am directing the Council on Environmental Quality and the Department of State, working in cooperation with ... other appropriate agencies, to make a one year study of probable changes in the world's population, natural resources, and environment through the end of the century. This study will serve as the foundation of our longer-term planning."

The idea behind these two sentences was proposed originally by Donald King of the State Department in a conversation with Lee Talbot and George Bensusky, who were working on a draft of the President's Message at the Council on Environmental Quality (CEQ). Talbot and Bensusky liked the idea, and Bensusky inserted the language into the draft Presidential Message, including the one-year schedule for the study.

Many people have asked why the Global 2000 Study took so much longer to complete than the one year specified in the directive. The answer is that the one year specified in the directive was established by Bensusky as an ideal target. Bensusky later told me his reasoning: "I had to write in something. If I wrote in 3 years, the study would take five. If I wrote in 2 years, it would take four. So I wrote in one year."

During the White House clearance of the draft Environmental Message, it was reviewed by Beth Sullivan, newly arrived from the Carter campaign. It seemed to Sullivan that an international study should involve both CEQ and State: she had the language changed making the study a joint responsibility of State and CEQ. The broad perspective provided jointly by these agencies had an important influence on the study.

In 1977 when the Message was signed, Mr. Charles Warren was Chairman of the Council on Environmental Quality, and Ms. Patsy Mink was Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs. They agreed that Mr. Warren, as Chairman of CEQ, was the "senior executive," but that they would co-chair an "executive group" of policy officials representing the participating agencies. They also agreed that

the Study's staff would be housed in offices at the Council on Environmental Quality.

In 1977 I was living in New York. Trained as a fusion energy physicist, I had decided after my doctoral dissertation to broaden my background. The first step was a few years of economic studies, operations research, modeling and simulation at the Center for Naval Analyses, followed by a year of postdoctoral study of population, resource and environmental issues at M.I.T. and Harvard in 1970. Then, after working on the Navy's environmental problems for a year, I joined the staff of the Council on Environmental Quality, where I was responsible for the Council's long-range forecasting and technology assessment. Toward the end of President Nixon's first term, long-range forecasting and technology assessment were not particularly high priorities, and after about a year-and-a-half, I moved to New York to work with Russell Peterson, the former Governor of Delaware, who was then directing Governor Nelson Rockefeller's Commission on Critical Choices for Americans. From the Commission, I joined the staff of the Rockefeller Brothers Fund, with administrative responsibility for the Fund's grants relating to population, conservation, and national economics. While at the Rockefeller Brothers Fund, I prepared a book entitled *The Unfinished Agenda*, which draws together the thinking of the leaders of the Nation's largest population and environmental groups on the most important problems the United States must face up to in the years ahead.

At the recommendation of Lester R. Brown, Mr. Warren and Ms. Mink asked me to assume the directorship of the Global 2000 study. Mr. Lawrence S. Rockefeller and Mr. William M. Dietel arranged a leave of absence from the Rockefeller Brothers Fund, and my family and I made a hasty move to Washington.

The first day as Study Director was a shock. There was no budget for the study. During the drafting of the directive, it was felt by both CEQ and State that the Office of Management and Budget would kill the study directive if any money were involved, so the directive had been drafted without any mention of budget. When I arrived on the job, CEQ had enough money to cover my salary, but any additional budget would have to be obtained by going around to other agencies with a tin cup. To round out the day, I discovered that there was no staff, very little office space, and that the "one year" had started the day the President signed the message (May 23), not the day I started work (September 3). Three months of the year were gone before I started. Later that day I checked with the Government Printing Office (GPO) and found that typesetting and printing would require three months at the end of the study. In short, by the end of my first day the time to conduct the analysis and write the report had shrunk to six months, and Mr. Warren had made clear that he wanted the work completed on time.

How is one to study the world and some of its most difficult problems in six months? How could a study done in only six months serve as a foundation for a nation's longer-term planning? These were the questions to be answered the first week of the Global 2000 Study.

Mr. Warren, Ms. Mink, Lee Talbot, Lindsey Grant (then Deputy Assistant Secretary under Ms. Mink) and I all wanted the Global 2000 Study to be made in a way that took into account the many interactions among population, resources and environment. This desire ruled out reusing past government studies in these areas because the past studies neglected virtually all interactions. Some people argued for using one of the privately developed models, for example, The World Integrated Model developed by Mihajlo Mesarovic and Eduard Pestal for the Club of Rome. I argued for another approach.

My concern focused not so much on the projections as on the President's purpose for the Study — to establish "the foundation of our longer-term planning." I argued that the report from any study — especially one done with a non-governmental model, or in only six months — could not provide a foundation for U.S. planning. The needed foundation would have to consist not so much of a report *per se*, but of data, models, and skilled personnel. I argued that the *study process* for the Global 2000 Study could establish a meaningful and useful foundation if, to the fullest extent possible, the Study was performed by U.S. Government personnel using U.S. Government data, and U.S. Government models. An analysis of the assumptions and methods inherent in the Government's current foundation for planning would also be useful, as would a comparison of the Government's models with privately developed models. Mr. Warren and Ms. Mink agreed to this approach. The contributing agencies were then asked to provide the needed data and analysis within an integrating framework, and a small central staff undertook an analysis of the agencies' projection methods.

Two other important decisions were made in the first weeks. One concerned policy, the other technology. Mr. Warren, a veteran of many years in the California legislature, had observed that nothing happens in government when a study is based on the assumption that laws and policies will be changed. As he put it, "The legislators look at the happy ending — and do nothing." Mr. Warren decreed — very wisely, I think — that the Global 2000 Study would assume a continuation of present policies.

As for technology, we decided to ask the agencies to make whatever technological assumptions they normally make in developing long-term projections. We later reviewed these assumptions and found that the agencies are generally assuming a continuation of rapid rates of technological advance. The Department of Agriculture, for example, projects yields per acre to continue increasing throughout the foreseeable future at rates comparable to the peak increases achieved during the "green revolution." The Department of Energy assumes implicitly that rapid advances in nuclear technology will substantially reduce public concern and construction delays, allowing nuclear-powered generating facilities to be tripled over the 1975-1990 period.

With these decisions on the Study's design and approach, Mr. Warren and Ms. Mink brought the members of the executive group together for a meeting in late September 1977. The agencies represented included the National Science Foundation, the Environmental Protection Agency, the

Department of Energy (and its predecessor, the Federal Energy Administration), the Department of Agriculture, the Department of the Interior, the Department of Commerce, the National Aeronautics and Space Administration, the Agency for International Development, the Office of Science and Technology Policy, the Federal Emergency Management Agency, and the Central Intelligence Agency — in addition to CEQ and State. The overall study plan was described, and each agency was asked to contribute \$50,000 to the budget.

It must be noted here that Government agencies generally have a multitude of reasons why they cannot provide money for projects such as the Global 2000 Study, and it is a major credit to Ms. Story Shem that all of the agencies eventually contributed. In addition to her many other contributions, Ms. Shem followed the agencies' paperwork until every contribution was in. The total came to about \$600,000, plus about \$350,000 that the agencies contributed in analysis and related work. Without Ms. Shem's (usually) gentle pressure, the Study would have faced severe financial problems.

With the overall plan and financing agreed upon, it was necessary to move rapidly into the analysis. The needed experts, data, and models were located with the assistance of a group of agency coordinators. An eight-page memorandum to the agencies' experts indicated what projections were needed — and requested a first draft in six weeks.

Most of the agencies' experts were very excited about participation in the Study. Some had attempted to develop and publish long-term projections previously and had experienced difficulty in having their work cleared and released. But while the agency experts were enthusiastic, some were not given much time or support. One explained that he was told repeatedly that the Global 2000 work was priority ten on a nine-priority system. One contributor was forced to do all of his work for Global 2000 on his own time. The six-week deadline for the first draft was therefore very tight.

After four weeks, little progress was apparent, so a weekend retreat was organized at the Belmont House in Maryland. At this retreat, the agencies' experts were to present their preliminary findings to a group of outside experts who had worked previously on systematic studies of global trends in population, resources, and environment. These outside experts were Anne Carter, Brandeis University; Nicholas G. Carter, World Bank; Anne Ehrlich, Stanford University; Peter J. Henriot, Center of Concern; Mihajlo Mesarovic, Case Western Reserve University; Douglas N. Ross, Conference Board; Kenneth E.F. Watt, University of California at Davis.

In many ways, the weekend at the Belmont House was the highlight of the entire Study. It brought together an exceedingly interesting and stimulating group of people, all of whom had information, ideas, and questions of interest to the others. The retreat was especially helpful to the Government people because the top professional expert on long-term global analysis from each contributing agency was present, and not one of them had ever met someone from another agency with a corresponding responsibility. The first evening was therefore devoted to getting acquainted.

The discussions the next day were stimulating and filled with provocative

questions. Did the Department of Energy *really* believe the real price of energy would remain constant at 1973 prices through the end of the century? How did the Department of Agriculture think that world food production could double by 2000? Where would the water, land, energy, and capital come from for both the energy and agriculture projections? What specific technologies did the Department of Interior think would keep the real price of nonfuel minerals constant or declining? These questions and their answers were particularly helpful to Mr. Ned W. Dearborn, who, as a member of the Study's small central staff, analyzed most of the agencies' models used in the Study for consistency of assumptions.

The retreat exposed two major problems: the nonfuel minerals chapter and the environmental chapter were not progressing satisfactorily. By the time of the retreat, the Department of the Interior had written nothing on the nonfuel minerals chapter. Eventually, the Interior simply refused to write the nonfuel minerals chapter, and Mr. Pieter VanderWerf, Mr. Allan Matthews, and I were forced to piece a chapter together.

The problem with the environmental chapter was complex. The memorandum initiating the projections requested each agency to analyze the environmental implications of its projections and to submit the environmental analysis along with projections. The environmental analyses were then to be combined into an environmental chapter. Unfortunately, the agencies' environmental analyses were completely missing or seriously inadequate. About the first of January 1978, it became clear that the agencies' environmental analyses would have to be extensively supplemented. Neither CEQ nor EPA had anyone available who could perform the needed work, and the task fell to Ms. Jennifer Robinson of the Global 2000 central staff.

In the previous three months Ms. Robinson had written Chapters 24-31 of the Global 2000 *Technical Report* reviewing the assumptions and structure of six world models and comparing these models with the Government's models. After this major assignment, Ms. Robinson took on the job of projecting the environmental implications of all of the other projections in the Study. The result — the first version of the environmental chapter of the *Technical Report* — was written largely by Ms. Robinson, again in only three months time.

At this point (March 1978) the study had been in progress for six months, and a decision had to be made. If the report was to be published on time (May, 1978), the manuscript had to go to the printer immediately. The manuscript was reviewed by CEQ and State. The CEQ staff had many concerns and questions about the environmental chapter, and it was decided to take additional time to rework the chapter.

The revision of the environmental chapter was difficult because the primary author, Ms. Robinson, had accepted an appointment at the International Institute for Applied Systems Analysis in Austria and was not available for further work on the chapter. Much clarification and 776 references were required over almost one year to answer all the CEQ questions, but ultimately Ms. Robinson's draft was upheld on virtually every major point.

By the time the environmental chapter was completed and the *Technical*

Report (Volume 2) sent to the printer (Summer 1979), the Study was a year overdue, and pressure was mounting for a quick completion of the summary volume (Volume 1). To complicate matters further, the four Government officials most directly responsible for initiating the Study had all left Government service. Mr. Warren had been succeeded by Mr. Gus Speth; Ms. Mink by Ambassador Thomas Pickering; Mr. Talbot by Ms. Katherine B. Gillman; Mr. Grant by Mr. Wm. Alston Hayne. Since the four new officials were unfamiliar with the design and evolution of the Study, the preparation and review of the summary volume required more time than expected. Along the way there was also one important change of direction.

Mr. Warren had felt that the most important audience for the Global 2000 report would be the general public, and he wanted the summary prepared in the format of a small paperback book suitable for wide public distribution. A book of approximately 150-200 pages would be adequate for a thoughtful synthesis and interpretation of the projections. During the approximately nine months that the summary volume was going through drafts (I think there were finally 14 drafts), the length was reduced substantially and format changed to a larger page size. The synthesis and interpretation was finally reduced to a section of less than 4 pages entitled "Entering the Twenty-First Century."

There have been various suggestions in the press that there were political pressures to "suppress" the report. To my knowledge these suggestions are unfounded. I am not aware of anyone having seriously suggested that the report not be published. There were certainly differences of opinion as to what the *Technical Report* (Volume 2) and the *Summary Report* (Volume 1) should say. With the exception of the environmental chapter, there were no major questions with the *Technical Report*, and all questions on the environmental chapter were resolved satisfactorily.

Most of the questions and differences of opinion centered on the *Summary Report*, but again, there was no suggestion of "suppression," (i.e., not publishing). The questions concerned differences of opinion as to what should be said and emphasized in the *Summary Report*. Ultimately all of what I regard as major points were made without any "suppression." If given the freedom, I would have written the *Summary Report* somewhat differently, including more synthesis and interpretation of the projections and emphasizing further the inadequacies of the Government's current capabilities for longer-term analysis and planning. But in my view, all of the major points are made — at least briefly — in the *Summary Report*.

The Global 2000 Report to the President: Entering the Twenty-First Century is an enormous study. Its three volumes total more than 1,000 pages. Why yet another volume? To serve the needs of professionals and students. The size of the full three volume study will make it difficult for professionals and students to find many relevant portions of the study. This single volume assembles those materials from the entire study most likely to be of interest and use to professionals and students. In addition, this volume explains the importance of other materials in the full report and provides background to the study not found in the Government's edition.

Is it necessary, then, to read more than the *Summary Report* for a full understanding of the Global 2000 Study? Yes. Students and professionals seriously interested in understanding and addressing the problems discussed in this Study will need information beyond that presented in the *Summary Report*. This volume facilitates access to some of the most important pieces of the entire three volume Report.

The *Summary Report* is the first piece reprinted here. It is the place to begin. The "Major Findings and Conclusions" section of the *Summary Report* (Chapter 1 of this volume) covers the highlights of the projections and states the conclusions. The "Study in Brief" section describes each of the projections in a total of only 30 pages and provides references to guide the reader to the sections of the *Technical Report* where many further details can be found. "Entering the Twenty-First Century" provides a short synthesis and interpretation. The appendix to Chapter 1 presents highlights from the comparison of other global studies with the Global 2000 analysis. The very important matter of inadequacies in the Government's current analytical capabilities is confined to about a page at the beginning of "The Study in Brief."

The second portion of the Study reprinted here, as Chapter 2, is Chapter 13 of the *Technical Report*. This chapter on environment projections is of central importance in understanding the Study and the problems it addresses.

Global environmental analysis is difficult. All of the global studies reviewed in the Global 2000 work were found to be seriously deficient in environmental analysis. So serious are the environmental deficiencies of past global studies that the International Institute for Applied Systems Analysis devoted its last global modeling conference to the problem of incorporating environmental considerations into global models. The reasons for the deficiencies are primarily two: (1) data on global environmental problems are limited, scattered and difficult to obtain, and (2) there are essentially no global environmental models.

The Global 2000 Study made an effort to include environmental analysis, and to a significant degree the study succeeded. From one perspective the Global 2000 Study has the most complete environmental analysis of any global study to date, but from another perspective the Study includes essentially no environmental considerations. On the positive side, about 80 percent of the environmental chapter is devoted to an analysis of the environmental implications of all of the other projections. This analysis is far more extensive and detailed than the environmental analysis in any other global study.

But the environment is not passive in nature. Impacts on the environment in turn have effects back on other sectors — on agriculture, fisheries, forestry, health, etc., — and environmental developments need to be taken into account in developing projections for the other sectors. Again on the positive side, the last 20 percent of the environmental chapter considers such linkages in an important section entitled "Closing the Loops." Unfortunately, however, it was impossible to do more than discuss the many ways in which the projected environmental developments *should* be incorporated in-

to the other projections. The other projections could not be modified to reflect the projected changes in environmental conditions, and in fact the other projections implicitly or explicitly assume that the environment will continue to provide its goods and services in vastly increased amounts, at no increase in cost (usually assumed to be zero) and with no maintenance, assumptions that are brought sharply into question by the environmental analysis. Virtually all of the projections made in the other global studies now available take environmental considerations into account more realistically than the Global 2000 projections do.

While the "Closing the Loops" section of the environmental chapter does not actually close any loops, the discussion in this section of missing linkages does provide additional synthesis and interpretation of the Global 2000 projections as a whole, and is thus a useful supplement to the very brief section "Entering the Twenty-First Century" found in the summary report. It is in "Closing the Loops" that the problem of the "vicious circle" is discussed. Briefly this problem is that in some areas population growth is leading to declining productivity of the land, which in turn leads to social and economic conditions that complicate efforts to reduce population growth, thus leading to still more pressure on the land. The "Closing of the Loops" section also discusses the best available estimate of the earth's ultimate carrying capacity and Census Bureau's estimates of the time to reach this limit at present and projected population growth rates. The estimated time is only a generation or so.

Finally, it should be noted that the environmental chapter begins each of the analyses of the other projections with a summary of the projections being analysed. These summaries were written before the writing of the *Summary Report* began, and they provide a useful supplement to the material in the *Summary Report*.

The third major portion of the Global 2000 Report reprinted here as Chapter 3, is Chapter 14 of the *Technical Report*. This chapter, "The Government's Global Model: The Present Foundation," is one of the most important chapters in the entire Study. It synthesizes and interprets all of what was learned in reviewing and analyzing the Government's present foundation for longer-term planning and analysis. The credit for this chapter and for the analysis that it summarizes belongs primarily to Mr. Ned W. Dearborn.

Many people have been confused by the title of Chapter 3. The Government, they point out, does not have a global model as implied by the title. True, the Government does not have a single, unified global model of population, resources and environment, but the Government does have a set of sectoral models dealing with global trends in population, and resources, and (to a limited degree) the environment. While the Government's sectoral models operate separately, these models have been developed and used under the implicit assumption that separate and distinct sectoral models can provide the executive branch with meaningful population, resource and environmental projections. These sectoral models provide for the executive

branch the same projections that a more integrated global model would provide, and it therefore seems both appropriate and necessary to consider these models collectively to be the Government's "global model."

Chapter 3 of this volume points out, however, that the sectoral models that make up the Government's global model are contradictory and inconsistent in many important ways. After looking at all of the pieces and assumptions and making comparisons with other more adequately linked global models, I have the distinct impression that the Government's analysis significantly underestimates the seriousness of the problems the world will face in the decades ahead.

The overall message of Chapter 3 is much more alarming than the brief reference to "inconsistencies" in the *Summary Report* would suggest. The fact of the matter is that one of the most powerful nations in the world is plunging ahead into the future with a vision of the world that is both myopic and astigmatic. This fact is even more alarming when one realizes that the United States probably has better data and better models than the vast majority of other nations in the world. The time has passed when the United States (or any other nation) can afford to base decisions affecting its future economic welfare and national security on an image of the world that is as distorted and out of focus as that produced by the U.S. agencies for the Global 2000 Study.

The fourth and final piece of the Global 2000 Report reprinted in this volume is Appendix A of the *Technical Report*. This Appendix, "Lessons from the Past," is a historic review of the Government's past efforts to take a long-term look at population, or resources, or the environment. While the Global 2000 Study is the first attempt by the Government to look collectively at long-term global trends in population, resources and environment, there is a history that stretches back at least 70 years of Government efforts to examine one or another of these topics separately.

Many of the studies done in the past reached important conclusions which, if they had been acted upon, would have provided long-term benefits, many of which we would be enjoying today. In general, however, the reports were put on the shelf and ignored.

Robert and Patricia Cahn, the authors of Appendix A, point to many lessons to be learned from the failure of past studies to lead to action. They conclude that perhaps one of the most important conditions for a report to be taken seriously is that it not be released during an election year. In this regard the Global 2000 Report has theoretically gotten off to a bad start. The Report's release has received wide coverage in the press, however, including a major segment on ABC Television's "20/20" news program in the middle of the Democratic National Convention, and a citizens' group has been organized under the name "Global 2000: The Challenge to Change" for the purpose of interjecting Global 2000 issues into the Presidential campaign.

The four pieces of the Global 2000 report reprinted in this volume will provide the professional and the serious student with a comprehensive overview of the Global 2000 Study. Further reading will be useful primarily to

pick out detailed information on selected topics. The following paragraphs outline where additional information on particular topics may be found.

Details of the agencies projections can be found in Chapters 2-12 of the *Technical Report* (Volume 2). There is much substantive material in these chapters that could not be presented in either the *Summary Report* or in the projection summaries that introduce the sections of the environmental chapter.

The deforestation projections (Chapter 8) provide a particularly interesting contribution. These projections by Mr. Bruce Ross-Sheriff are to my knowledge the first such projections ever made. The comprehensive data presented in the projections, combined with the U.S. embassy reports presented in Appendix C (*Technical Report*) provide a particularly striking picture of the current extent of deforestation and associated problems.

The information presented in Chapter 14 (reprinted in this volume) is only an overview of the penetrating analyses of the projections and the underlying models made by Mr. Dearborn and Mr. Pieter VanderWerf of the Global 2000 central staff. Anyone wishing to understand the analytical basis for the Government's current image of the world will want to read the full analyses presented in Chapters 15-23 of the *Technical Report*.

Chapters 14-23 provide a criticism of the projections and models from the perspective of the Global 2000 mission, but the advisors to the Study had broader criticisms. The advisors' criticisms are presented in Appendix B of the *Technical Report*. They take up a very wide range of methodological and institutional issues. Anyone seriously interested in the question of Government foresight will be interested in the ideas presented in Appendix B of the *Technical Report*.

Since the publication of the *Limits to Growth* in 1972, a number of global models have been developed. Five global models and their assumptions are reviewed in Chapters 24-29. These chapters describe the methodology, model structure and conclusions from these five global studies. The conclusions of the Global 2000 Study have been compared with those of the other global studies. These comparisons are presented very briefly in the Appendix to the summary report (reprinted in this volume). Chapters 30-31 of the *Technical Report* make the comparisons in more detail.

Finally, the third volume of the Global 2000 report, *The Government's Global Model*, presents in a single volume the basic documentation currently available on the Government's long-term global models. Some of this documentation was difficult to obtain, and its collection in a single volume will be of much interest to students, researchers and other professionals concerned with Government foresight.

The central message of the Global 2000 Report is easy to understand. The most knowledgeable professional analysts in the executive branch of the U.S. Government have reported to the President that, if public policies around the world continue unchanged through the end of the century, a number of serious world problems will become worse, not better. In addition, the Global 2000 Study reports that the agencies' projections are flawed in many ways and probably understate the seriousness of the problems ahead.

Addressing the problems discussed in the Global 2000 Report is far beyond the resources and responsibility of the United States or of any other individual nation. Effective action will require extensive international cooperation.

President Carter has already begun to bring the Global 2000 Report to the attention of world leaders. Even before the Report was released, the President discussed it with the heads of industrialized nations at the June 1980 economic summit meeting in Venice. Following the release, the President directed the State Department to raise the Global 2000 Report and its issues in every appropriate international forum. The State Department has already briefed foreign diplomatic staffs in Washington and has directed U.S. embassies abroad to bring the Study to the attention of appropriate officials in foreign governments. Secretary of State Muskie referred extensively to the Report in his first speech to the United Nations. The President has further directed the State Department to organize an international conference in Washington at which the Global 2000 Report and related studies by other governments will be discussed.

President Carter has also appointed a high level task force to report to him in six months on specific actions that can be taken by the United States in responding to the Global 2000 Report. The President's task force is chaired by Mr. Gus Speth, the Chairman of the Council on Environmental Quality. The task force members are the Secretary of State, the Director of the Office of Management and Budget, the Assistant to the President for Domestic Affairs and Policy, and the Director of the Office of Science and Technology Policy.

The President's task force has at least two important topics to address. First, the task force must develop responses to the world problems described in the Global 2000 Report. As published, the report analyzes only one policy scenario — continuation of business as usual. The task force will need to identify other policy scenarios and analyze their relative advantages as a basis for specific recommendations. The task force will also need to follow up on the President's purpose for the Global 2000 Study — namely, to establish "the foundation for our longer-term planning." Through the process of the Global 2000 Study, a foundation of skilled professionals, data, and models has been established. The Study also documents in detail the serious weaknesses in this foundation. It is to be hoped that the task force will find ways to strengthen the Government's present foundation for longer-term planning and to institutionalize its use.

The Global 2000 Report is not a prediction of doom. It is, however, a projection of world conditions that could develop by the end of this century if very real problems are ignored. The challenge and the opportunity of Global 2000 were summed up nicely by Secretary of State Muskie on the occasion of the Report's release. The Secretary said: "If we begin our work now, we will say in twenty years that the Global 2000 report was wrong. And we will congratulate ourselves for having had the foresight to build a better future."

Gerald O. Barney
Study Director