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The Growth of World Population

National Academy of Sciences

THE GROWTH OF WORLD POPULATION

The Growth of World Population

Analysis of the Problems and
Recommendations for Research and Training

COMMITTEE ON SCIENCE AND PUBLIC POLICY
NATIONAL ACADEMY OF SCIENCES

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The problem of uncontrolled population growth emerges as one of the most critical issues of our time since it influences the welfare and happiness of all the world's citizens. It commands the attention of every nation and society; the problem is no less grave for the technically advanced nations than for the less developed.

If we are to meet this challenge, we must make use of the knowledge that science and technology can bring to bear on the social, cultural, and bio-medical questions involved.

I hope that this report of the Committee on Science and Public Policy of the National Academy of Sciences will serve as a stimulus to thought and action. It is addressed not only to other scientists but to people generally, since all must bear the ultimate responsibility.

Frederick Seitz, *President*
National Academy of Sciences

Washington, D. C.
April, 1963

Panel on Population Problems

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Foreword

The Committee on Science and Public Policy of the National Academy of Sciences, aware of the increasing public concern over the effects of uncontrolled population growth, brought together in the fall of 1962 a panel of distinguished scientists to review and summarize the findings of others on population growth and its consequences.

In the report that follows, the panel has analyzed and evaluated the existing situation, identified the immediately critical problems, and suggested a course of action. Because of the nature of the problem, the report deals not only with its bio-medical aspects but with social and economic factors as well. A reading of the report leaves no doubt about the importance and urgency of the subject.

Here as elsewhere science and technology can play a major role in the realization of human expectations of future improvement. On behalf of the National Academy of Sciences and members of the panel, the Committee on Science and Public Policy presents this report to the public with the hope that it will contribute to a broader understanding of the consequences of rapid population growth and, through a recommended course of action, to its eventual control.

George B. Kistiakowsky, *Chairman*
Committee on Science and Public Policy

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Introduction

All nations are committed to achieving a higher standard of living for their people—adequate food, good health, literacy, education, and gainful employment. These are the goals of millions now living in privation. An important barrier to the achievement of these goals is the current rate of population growth. The present world population is likely to double in the next 35 years, producing a population of six billion by the year 2000. If the same rate of growth continues, there will be 12 billion people on earth in 70 years and over 25 billion by the year 2070. Such rapid population growth, which is out of proportion to present and prospective rates of increase in economic development, imposes a heavy burden on all efforts to improve human welfare. Moreover, since we live in an interconnected world, it is an international problem from which no one can escape.

In our judgment, this problem can be successfully attacked by developing new methods of fertility regulation, and implementing programs of voluntary family planning widely and rapidly throughout the world. Although only a few nations have made any concerted efforts in this direction, responsible groups in the social, economic, and scientific communities of many countries have become increasingly aware of the problem and the need for intelligent and forthright action. We recommend that these groups now join in a common effort to disseminate present knowledge on population problems, family planning, and related bio-medical matters, and to initiate programs of research that will advance our knowledge in these fields.

More than bio-medical research will be required, for control of population growth by means of voluntary regulation within each family poses major social and economic problems that can be solved only in part by biological means. Of special importance is the need for extensive and immediate research in the field to learn how we can make family planning more effective in societies that recognize the need for it. The challenge to students of social problems can hardly be overstated.

In view of its relationship to the welfare of all men, individually and collectively, the problem of population growth can no longer be ignored. Increased understanding of present procedures and development of new methods for regulating fertility will maximize the freedom of all parents to determine the size of their families even in those countries where population growth is not an urgent social problem but where fertility regulation can have great personal significance. It should be emphasized that the kinds of basic bio-medical investigations that will contribute to solutions of problems of human fertility will also provide information that can be applied to the development of methods for overcoming sterility, for influencing embryonic development in order to repair genetically determined biochemical deficiencies, for avoiding harmful influences of drugs taken during pregnancy, and, in general, for assuring optimum conditions for embryonic and fetal development.

In pursuit of these objectives, many different kinds of institutions in the United States, both public and private, have important contributions to make. Other than the search for lasting peace, no problem is more urgent.