

News and Comment

Birth Control: National Academy Issues Report Calling for Major Effort in Population Planning

In 1960, when George B. Kistiakowsky, the Harvard chemist, was the White House science adviser, he accompanied President Eisenhower to the Far East. "My entire White House service was an educational process for me," Kistiakowsky commented in a recent interview, "but on that trip, the 'population problem' really took on meaning for me. It had a personal and shocking impact and I became convinced that it was time that the technical resources of this country were mobilized to do something about it."

Eisenhower's personal aversion to government involvement in anything associated with birth control put the subject out of bounds for officials of his administration. But Kistiakowsky's impressions of that journey did not fade after he left full-time government service. He subsequently became chairman of the National Academy of Sciences' newly created Committee on Science and Public Policy, and one of his first acts was to create an eight-member Panel on Population Problems, headed by William D. McElroy, chairman of the department of biology and director of the McCollum-Pratt Institute at Johns Hopkins University.

With a \$5000 grant from the Population Council, a nonprofit organization devoted to promoting population and fertility studies, the panel last year started a survey of population growth and its consequences, especially on the economic growth of the underdeveloped countries. Yesterday the panel made public its first report: *The Growth of World Population, Analysis of the Problems and Recommendations for Research and Training* (publication No. 1091, 38 pages, available for \$1 from the National Academy of Sciences, Washington, D.C.). The report is brief, lucid, honest, and humane,

and, on a subject that often elicits excess and astonishing logical gymnastics, it is informed, restrained, and responsible. Although the passage of time often mocks predictions of durability for a contemporary work, it is not unlikely that the Academy report will exert considerable influence for a long time and take its place as something of a classic in the very much overpopulated field of writings on the population problem.

Briefly, the report states that uncontrolled population growth, particularly in the nations striving for economic development, is a critical problem that cannot be ignored, either by those nations or by the industrial nations seeking to assist them. "Other than the search for lasting peace," it asserts, "no problem is more urgent" than the population problem. Referring to the "depressive effect that uncontrolled growth of population can have on many aspects of human welfare," it states that "nearly all our economic, social, and political problems become more difficult to solve in the face of uncontrolled population growth." And it goes on to say that research, training, and public education aimed at decelerating population growth should be expanded at once.

These views are by no means unique. And whatever credit accrues to it for presenting the report, the Academy cannot be accused of being in the forefront of awareness of the population problem. The same message has been shouted for years by the various private organizations that have arisen in response to population problems; it finally permeated official thinking to the point where the United States last year supported a resolution calling for the United Nations to assist member nations seeking to cope with their population problems (*Science*, 14 December 1962). Moreover, the Academy report comes at a time when disparate elements in the birth-control

controversy—the Catholic Church included—are in agreement that unrestrained population growth is not a desirable goal, and that research for improved birth-control techniques is in everyone's interest. The religious acceptability of the fruits of such research is something else. The Catholic interest in research is centered on improving the rhythm method, but, significantly, no one is against taking the first step of looking hard at the manifold biomedical problems of fertility. If research should produce a cheap, effective pill that would win quick approval in India, for example, the antagonism of the Church would be there, but whether it could affect the course of events is another matter.

What is significant about the Academy report is, first of all, that it comes from the Academy, the prestigious apex of American science. And since the Academy has traditionally been reluctant to get mixed up in even less volatile public-affairs issues than birth control, its outspokenness in this case booms louder than outspokenness on the part of one of the "regulars" in the population question. In addition, against the background of the Academy's standing in American intellectual life, the report commands attention simply because of its quality and persuasiveness.

It opens with a brief statement from Frederick Seitz, president of the Academy: "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 biomedical questions involved.

"I hope that this report . . . 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."

The report then goes on to say that the present world population of 3 billion is likely to double within the next 35 years. "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 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 control and implementing programs of voluntary family planning throughout the world. . . . 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."

Addressing itself to the argument that accelerated economic development can of itself accommodate population growth, the report states: "the realistic question in the short run does not seem to be whether some increases in per capita income are possible while the population grows rapidly, but whether rapid population growth is a major deterrent to a rapid and continuing increase in per capita income."

In India, it notes, failure to reduce the birth rate will probably cause the population to double in the next 25 to 30 years, to about 900 million persons. "In the same period, the output of the non-agricultural part of the Indian economy probably would be slightly more than doubled if the birth rate remains unchanged. For a generation, at least, then, India's economic output probably can stay ahead of its maximum rate of population increase. This bare excess over the increase in population, however, is scarcely a satisfactory outcome of India's struggle to achieve economic betterment. The real question is: Could India and other less-developed areas of the world do substantially better if their birth rates and thus their population growth rates were reduced? Economic analysis clearly indicates that the answer is yes. Any growth of population adds to the rate of increase of national output that must be achieved in order to increase per capita output by any given amount. . . . Moreover, rapid population growth and a heavy burden of child dependency divert investment funds to less productive uses—that is, less productive in the long run. To achieve a given level of literacy in a population, much more must be spent on schools. In an expanding population of large families, construction effort must go

into housing rather than into factories or power plants."

" . . . a short-term increase in per capita income may be possible in most less-developed areas, even if the fertility rate is not reduced. Nevertheless, even in the short run, progress will be much faster and more certain if the birth rate falls. *In the longer run, economic progress will eventually be stopped and reversed unless the birth rate declines or the death rate increases* [italics supplied]. Economic progress will be slower and more doubtful if less-developed areas wait for the supposedly inevitable impact of modernization on the birth rate. They run the risk that rapid population growth and adverse age distribution would themselves prevent the achievement of the very modernization they count on to bring the birth rate down."

As for the means of achieving a lower birth rate, the report stresses that to convince rural, illiterate populations of the need for family limitation will require a meshing of a broad range of disciplinary skills. "In no other social problem is the interconnection between human and technical factors so critically important as in fertility regulation. The better the contraceptive—better in ease of use and effectiveness—the less the social resistance to the acceptance of family planning and the greater the efficiency of implementing voluntary fertility regulation where it is needed. Thus, the two sets of factors, the social and the bio-medical, are closely interwoven, and the social acceptability of family planning depends heavily on the development of applied knowledge in the bio-medical field. . . ."

In its specific recommendations the report calls for greatly expanded programs of fertility research and for support of graduate training in demography and in the social and biomedical sciences concerned with population problems. In making these recommendations, it closely parallels the proposals that were originally contained—but later removed in a curious fit of fear—from a National Institutes of Health survey of fertility research. That survey, which was at first withheld from publication and later released without the research proposals, reported that government, industry, and private foundations spent \$6.1 million on fertility-related research in 1961. It recommended a minimum annual program of \$4.6 million for

training, \$7 million for research and \$5 million for field and clinical trials; in addition, a single expenditure of \$4 million to help finance the construction of eight research centers was recommended. With NIH now in the midst of presenting its requests for congressional appropriations, none of its officials is eager to discuss the implementation of these proposals, but it is generally felt to be likely that increased funds will go into fertility research and training.

The Academy report also suggests that the United States Government seek to promote international cooperation on "studies concerned with voluntary fertility regulation and family planning," through the United Nations as well as other intergovernmental and nongovernmental organizations.

Another recommendation calls for the United States to "improve and enlarge" training programs for "family-planning administrators." Noting that "the effectiveness of family-planning programs in both highly developed and less-developed areas is limited by the lack of administrators skilled in carrying such programs to the people," it states, "this country can perform a most useful service now by training administrators who will become instructors in their own countries."

And, finally, the report recommends that the Academy assume an active and continuing role in the population field by establishing a committee that would stimulate and coordinate "programs directed toward the solution of problems of uncontrolled growth of population."

McElroy's fellow panel members are William Allen, Washington University; Bernard Berelson and Warren Nelson, the Population Council; Ansley Coale, Princeton University; Harold Dorn, NIH; Clement L. Markert, Johns Hopkins University; and Albert Tyler, California Institute of Technology.

—D. S. GREENBERG

Cambridge's Revenge: Dons Say Hailsham Threatens U.S. Support, Block Honorary Degree for Him

The senior faculty at Cambridge University has had its vengeance on Lord Hailsham, the British Minister for Science, who last February denounced this country for what he described as looting of Britain's scientific manpower resources (*Science*, 8 March 1963). Stressing good taste