

happy to have them both, and we do understand, Mr. Chairman, that you have some connection with this organization.

Mr. MILLER. Well, I haven't a connection. I have a very great interest in it. I know Dr. Olive knows and the other gentleman sitting over here. I want to welcome him here. He is a very fine and old friend. And without injecting anything else into the subject, we will let it go at that.

Dr. OLIVE. Thank you, Mr. Chairman. We have prepared a statement which I would like to deliver to you at this time.

(The prepared statement of Prof. J. R. Porter, presented by Dr. Olive, is as follows:)

PREPARED STATEMENT OF PROF. J. R. PORTER, PRESIDENT, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, PRESENTED BY DR. JOHN R. OLIVE, EXECUTIVE DIRECTOR, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

Mr. Chairman and Members of the Subcommittee, on behalf of the members of the American Institute of Biological Sciences (AIBS) I am pleased to present a statement concerning the participation of biologists from the United States in the International Biological Program (IBP).

The AIBS through its 44 adherent societies with a membership of approximately 60,000 biologists, and with about 14,000 individual members, has long been aware of the role biology plays in productivity and human welfare throughout the world. For example, the *Congressional Record* (14 June 1960, A5007) shows that one of our members realized the importance of the many biological problems facing mankind some years ago. At the time he proposed a "biological decade". A radio program on the topic was also sponsored by Georgetown University Forum of the Air. And, most of the members of the U.S. National Committee, and its various Subcommittees, for the IBP hold membership in the AIBS. Thus the important aspects of the International Biological Program are endorsed and supported by the American Institute of Biological Sciences.

We are aware of the great technological developments that have occurred since the Industrial Revolution. But unfortunately with all these advances man has been unable to adjust properly to his environment, although he has come to appreciate more and more that the earth is a closed ecological system.

Ecologists and others have warned for some time that our food and natural resources are limited, and that our casual methods for the disposal of wastes are unsatisfactory for a closed system. Furthermore, if we do not make certain adjustments soon, natural forces will take over, as they inevitably have in the past, and bring about the "biological steady state." As rational human beings we cannot leave the restoration of the steady state to such natural forces as the great equalizers of the past—War, Famine, and Pestilence.

We know that some of the most perplexing ecological problems today relate to (i) how to improve health, education, and commerce—in brief, the standard of living—of people in the emerging countries of the world, and (ii) how to provide food and water for all people on the earth.

To illustrate the significance of these problems a few statistics may be cited. In 1750 the world's population was around 728 million and at the turn of the 20th century about 1600 million. Roughly, the population doubled in 150 years. The United Nations' census for 1960 recorded 3,000 million as the world population, or a doubling in the past 60 years. The increase was 500 million during the 1950's and it was 75 million more people than predicted by demographers. The best estimates now are that the world's population will double before the turn of the century, and again before 2040, unless unforeseen catastrophes interfere or radical countermeasures are adopted. In the United States the birth rate is now declining slightly, and during the past 20 years the rate of growth has not been alarming. But this has had little influence on the world population.

With more than half the people of the world now suffering from hunger and serious disease, the ingenuity of man will be strained severely during the next several years if social and economic conditions are to be improved. The International Biological Program offers one of our few hopes for solving some of the important problems.

Production of food increased in the world from 1950 to 1965 but, per capita, yields remained essentially constant. The Food and Agricultural Organization