

*Question 9. What is the plan to use this data as a management tool?*

Answer. The budgetary analysis will be used to identify existing programs. Particular attention will be given to the balance among programs, to coordination of activities and to areas which might require additional effort. Assessments and recommendations of the Committee will be submitted to FCST and OST. Following approval, the information will be used by the agencies in developing their programs, by OST in advising the President on Policy issues and in consulting with the Bureau of the Budget. It will, of course, be available to the Congress in assessing the overall program and its balance.

*Question 10. Will you designate additional lead agencies? Are the data good enough to compare relative emphasis or priorities?*

Answer. It is not possible to say at this time whether lead agencies will be designated, other than those already given clear authority by the Congress. In general, the designation of lead agencies has not been particularly successful except when, as in meteorological services, a single agency is clearly dominant.

Emphasis and priorities do not derive from data in any mechanical way, but must be based on analysis of many factors plus good judgment. A great deal more data are needed to make sound analyses and judgments.

*Question 11. Have any steps been taken to implement recommendations of this Subcommittee in October 1966 "toward establishing systems analysis and management capability within the Federal Government"? Please describe.*

Answer. Steps have been taken to implement the Subcommittee's recommendation in environmental fields such as water and air pollution and solid waste disposal. In water pollution research, substantial steps are being made in developing "P-P-B" analysis. In addition, the testimony presented by Assistant Commissioner Leon Weinberger before the Subcommittee on January 31, indicates a systematic evaluation of research problems and programs underway by his agency.

Within HEW, air pollution and solid waste disposal programs are both undertaking activities that will lead to increased utilization of program analysis and development in a "systems" sense (see also Answer to Question No. 20).

*Question 12. Concerning "health" vs. "resource" concepts for environmental quality: The Department of the Interior seems to be emerging as the champion of environmental quality. Could you discuss the pros and cons of recognizing one agency as an "assessment function" for all Federal activities which affect environmental quality?*

Answer. OST regards the "health vs. resource concepts for environmental quality" as an artificial dichotomy based upon traditional missions of Departments. The Department of Interior is not, in our view, any more the champion of environmental quality than is the Department of Health, Education, and Welfare or the Department of Housing and Urban Development.

There are numerous, legitimate reasons for preventing pollution ranging from those which pertain directly to health such as purifying drinking water to those associated with other values, such as wildlife preservation or the beauty of a landscape. One of the most difficult tasks ahead will be deciding on the relative values we are willing to assign to various aspects of environmental quality as a basis for subsequent action.

Economic or cost-benefit analysis in the areas of mineral, forest, or fuel resources are quantifiable. In contrast, specific indicators for aesthetics, health, and preservation of animal and plant species are less easily quantified but not necessarily less important as components of "quality" in the environment.

The assignment of an "assessment function" to a single agency would imply self-assessment if the agency had program responsibility. It would also imply the assessment of the programs of one agency by another peer agency. In the past this concept has proved unsatisfactory or even unworkable.

To place our national program in context, it is necessary to emphasize that the United States economy is product-market oriented. In response to this fact, we have developed a Federal science structure which provides a capability for responding to specific segments of the economy. This arrangement prescribes that agency responsibilities should extend through a continuum from research, through intermediate activities to action programs. This facilitates the smooth flow of research discoveries into programs which can exploit and utilize them. The advantages of such a system are obvious.

Wastes are produced or spun off in the course of the production process and