

Planning, Programming, Budgeting System

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Highlight

In August 1965, President Johnson issued a memorandum directing the heads of all government departments, bureaus, and agencies to install a programmed budgeting system better known as Planning, Programming, Budgeting System (PPBS). Now, more than two years later, very few range technicians or scientists know what PPBS is, nor do they know how it will affect their work. The PPBS system is explained and a reading list is included for those persons interested in pursuing the subject further.

Although many range people are talking about PPBS, very few of them actually know what it is. Several facetious suggestions have been made as to what the initials stand for, but in truth, PPBS stands for Planning, Programming, Budgeting System. In August 1965, President Johnson issued the memorandum directing the heads of all government departments, bureaus, and agencies to install this system. Since then, implementing PPBS has progressed very slowly. Part of the reason for the delay was and is due to the fact that not many people even at the highest levels in government know what it is. What is even more distressing, of those who know what it is, very few know at present how they are going to implement PPBS.

To understand the dilemma that the agencies are in, we should look at how PPBS got its start, why it was initiated, and what it is hoped PPBS will accomplish.

Beginning as early as 1912, President Taft's Commission on Economy and Efficiency recommended drastic changes in existing budgeting and decision-making procedures. These changes along with those brought about by our two World Wars and the recommendations of the two Hoover Commissions led to the Department of Defense adopting a Programmed Budget in 1961.

Before programmed budgeting, or under what we might call the old system, budgets have been organized at the highest levels by executive departments. These budgets have usually been projected only one year ahead and emphasis has been on such things as personnel, supplies, and equipment. These budgets are what we might call *input oriented*. In other words, they focus on the people and supplies or other inputs that must be brought together if the programs and activities of a department or agency are to be achieved. This old system

has proved satisfactory for relatively simple repetitive operations where no serious questions exist about the purposes of government activities and the value of their accomplishments. However, the old system is not well suited to decisions in a complex environment. This is the main fault of the old system. There is too little emphasis placed on the methods by which programs are chosen. In short, the old system gives little help in determining whether we are spending the proper amount of money on the right things or not.

Decision Making

The proponents of the PPBS system believe it will improve decision making in the government. The system is designed to provide more effective information and analyses for decision making at all levels from (say) BLM and Forest Service districts up to the president.

The overall system is modeled on the one developed and tested in the Department of Defense during the past 6 years. The Defense Department began many years ago to lay the ground work for a planning and budgeting system. One key concept that facilitates the implementation of a planning budgeting system is that of weapons systems—each system is an aggregate of the men, material, and facilities associated with a reasonably well defined *output oriented* as opposed to *input oriented* military program. Such a weapons system is examined from two points of view; (1) its contribution to the effectiveness of our defenses, and (2) the cost of providing this capability. By ranking the various methods of achieving a certain capability, the best method or weapons system can be chosen.

PPBS places major emphasis on identification of program objectives and the measurement of "results" or "output" in quantitative terms. However, identification of "output" or "results"-oriented objectives is very difficult in the natural resources area. In fact, the problem at present in implementing PPBS in the natural-resource oriented agencies is finding the output-oriented program categories to implement the system.

The program categories are intended to group the things the BLM, Forest Service, or other agencies and departments do in such a way that they will bring into focus the goals and objectives of the agency so they fit into national goals and needs. Here is where citizens, interest groups, Congress, administrators, and public servants need to revise their traditional ideas and do some bureaucratic unlearning. Administrators in government, and even the general public, have a tendency to think of programs in terms of "input oriented" categories, i.e., paying salaries of employees, purchasing supplies and equipment, building capital as-

sets, or operating pieces of machinery. It is often very difficult for them to back off and define explicitly the end product which these processes all serve. This task becomes even more difficult because some subjects are just plain very hard to get a grasp on. What, for instance, is the goal of range reseeding? Is it to improve forage, improve watershed values, to improve aesthetics, or what? And take the field of recreation, how do we measure it? What are the outputs? Visitor days? Picnic tables? Miles of scenic vista or what? And how do we try to design a program structure that can account for recreation in National Parks, in National Forests, at National Wildlife Refuges, at Bureau of Reclamation reservoirs, and on the vast expanse of the Public Domain. These are the problems which must be solved before PPBS can be implemented successfully, because PPBS focuses on "output-results oriented categories" rather than the means to these ends (input-oriented categories).

The main source of information on PPBS, at present, is the Bureau of Budget Bulletin 66-3. This is not a "cookbook" but sets down only general guide lines that identify the major elements of the system and the results to be obtained. Although the manner in which PPBS will be implemented in each agency, bureau, and department is not finalized, the overall system is designed to enable each agency to: (1) Make available to top management more concrete and specific data; (2) spell out more concretely the objectives of Government programs; (3) analyze systematically and present, for agency head and presidential review and decision, possible alternative objectives and alternative programs to meet those objectives; (4) evaluate and compare benefits and costs of programs; (5) produce total rather than partial cost estimates; (6) present on multi-year bases the costs and accomplishments of programs; and (7) review programs on a continuing, year round basis instead of on a crowded schedule to meet budget deadlines.

PPBS is not a new revolutionary approach. Economists and private businessmen have been using the system for years in decision making. Even in terms of government decision making, there is very little that is new when you take PPBS apart piece by piece. What PPBS represents is an evolution and strengthening of the existing budgeting system and the thing that is new about PPBS is that it brings together the various elements of decision making—something which has been little more than wishful thinking in the past.

Good Data Needed

You will be hearing more and more about PPBS and the agencies will no doubt be holding short-courses on pure economics in the not too distant

future—because that is all PPBS is—managerial economics.

In due time, there will be a manual to follow so there is no reason at present to go into more detail. It is important however, to cover some points which it is anticipated will be troublesome to those people who have to implement PPBS. The first point is that, although decision making under PPBS will strive for greater economic efficiency and be more like that in private enterprise, not all public objectives are compatible with pure economic efficiency. The public, elected representatives, or administrators may decide to pursue an objective other than economic efficiency, or to select a means that is not the most efficient, because it has social or political objectives rather than economic ones. But, even when economic efficiency is not a goal, PPBS-type analyses can improve and strengthen decision making and will contribute to better management by forcing explicit definition of the objectives and by helping to choose least-cost methods to achieve these objectives. It will also permit explicit structuring of ends and means and clear identification of ends (outputs) and means (inputs) as separate kinds of information.

The second point is that it is argued that PPBS will end the controversy as to whether range improvements pay or not. Nothing will be decided if good data are not available and this leads to the third point. It will be the responsibility of range scientists and technicians to supply these data. It will also be their responsibility to supply data in a meaningful form. Data suitable for ecological analysis is often inadequate for the economist or analyst. The type of data required, of course, will in many cases be multiple-rate or intensity data.

Lastly, in regards to data, since under PPBS people at lower echelons of management may have responsibility for data which will affect decisions at higher levels, the lower echelons will have a responsibility to make the data available. The trouble in many cases is the data simply are not available. What will be done, for instance, if some questions are raised about reseeding? Technicians will have responsibilities to the grazing permittees and other users to do a thorough job of gathering and supplying data. They will also have a responsibility to the bureaus and agencies. What does one do when he doesn't have the data?

An example might illustrate how important good data will be and how important the lower-echelon decision-making units will be. When PPBS gets into full swing, it probably will be implemented with a benefit-cost ratio as a ranking device. Presumably only those projects with a benefit to cost ratio of one or greater will be considered. Consider what will happen in the Forest Service. Every district will be submitting projects for approval. Each

Forest office will choose from the Districts those projects with the highest benefit to cost ratios. From the Forest, the Regional Office will choose the highest ratio projects and send them to Washington, D.C. where the Regional projects will be analyzed. Forest Service projects will then be compared to other Department of Agriculture projects. Then Department of Agriculture, Department of the Interior, and other departmental projects will be reviewed by the President and the Bureau of the Budget. Thus, how much understanding of the problem a range technician at the district level displays in the write up of a project will have a profound effect on whether it is approved or not. In this light, it behooves all range scientists, technicians, and agency personnel to be at least a little familiar with economics.

In closing, there are some things that PPBS is not:

(1) It is not a substitute for judgment, opinion, experience, and wisdom, but our judgment is no better than our information and PPBS should improve our information.

(2) It is not an attempt to computerize the decision-making process, although computers will surely enter the picture to solve more complex problems such as linear programming models, etc.

(3) It is not a fad that will go away.

(4) It is not just another way to cut expenditures. In fact, it may show some programs have not been receiving adequate support.

(5) It is not just another piece of red tape.

(6) It is surely not the answer to every problem nor a major problem solver. Neither will PPBS change the form in which the budget is sent to Congress. It should lead, however, to an improvement in the quality of the data and of the justifications that are submitted in support of the budget. PPBS recognizes the hard choices which must be made. Those who advocate PPBS do so on the belief that with more information, with better information, with alternative programs or goals spelled out, and with alternative ways of meeting these goals, some of the decisions of the future will hopefully be better decisions.

In short, PPBS ought to help whenever possible to derive the maximum benefit for every dollar spent or per man day paid. PPBS is, plain and simple, the application of the principles of problem solving and decision making in managerial economics to the problems of running the governmental apparatus.

For Further Reading

For those interested in improving their own and their country's decision-making capabilities, the following list of readings in Economics and PPBS may be of value.

Elementary Economics

BISHOP, C. E., AND W. D. TOUSSAINT. 1964. Introduction to agricultural economic analysis. Wiley. 258 p.

McKENNA, JOSEPH P. 1958. Intermediate economic theory. Dryden Press. 319 p.

McKENNA, JOSEPH P. 1955. Aggregate economic analysis. Dryden Press. 244 p.

SAMUELSON, PAUL A. 1964. Economics, an introductory analysis. McGraw-Hill Book Company. 810 p. (Especially chapters 1, 2, 4, 19, 20, 21, 22, 23, and 25)

Advanced Economics

LEFTWITCH, RICHARD H. 1961. The price system and resource allocation. Holt. 381 p.

BAUMOL, WILLIAM J. 1961. Economic theory and operations analysis. Prentice-Hall, Inc. 438 p.

Planning, Programmings, Budgeting System

DORFMAN, ROBERT, ed. 1965. Measuring benefits of government investments. The Brookings Institution. 414 p.

HITCH, CHARLES J. 1965. Decision making for defense. University of California Press. 78 p.

HITCH, CHARLES J., AND ROLAND N. McKEAN. 1965. The economics of defense in the nuclear age. Atheneum. 505 p.

McKEAN, ROLAND N. 1958. Efficiency in government through systems analysis. Wiley.

NOVICK, DAVID, ed. 1965. Program budgeting . . . program analysis and the federal budget. Harvard University Press. 310 p. Also available in paperback with 3 fewer chapters. U.S. Govt. Printing Office. 236 p.

U.S. BUREAU OF THE BUDGET. 1965. Planning-Programming-Budgeting (Bulletin 66-3) Washington, D.C. (and the supplement to 66-3).

Benefit Cost Analysis

ECKSTEIN, OTTO. 1958. The economics of project evaluation. Harvard University Press. 300 p.

SMITH, STEPHEN C., AND EMERY N. CASTLE. 1964. Economics and public policy in water resource development. Iowa State University Press. 463 p.

U.S. FEDERAL INTER-AGENCY RIVER BASIN COMMITTEE, SUB-COMMITTEE ON BENEFITS AND COSTS. May, 1950. Proposed practices for economic analysis of river basin projects. U.S. Govt. Printing Office.

U.S. SENATE DOCUMENT 97. 87th Congress. Policies, standards and procedures in the formulation, evaluation, and review of plans for use and development of water and related land resources. Also supplement No. 1.