

Some general approaches to these difficulties were indicated in the first part of this talk. Their resolution in the context of specific External Affairs problems will, however, require considerable analytical experience, coupled with policy guidance. Obviously, trade objectives can be quantified to a much greater extent than political objectives. Similarly, immigration can be quantified to a far greater extent than research and policy planning. The trick in each instance is to push the quantification of costs and benefits as far as you can without going beyond the bounds of common sense and substituting the spurious assignment of numbers for real analysis.

There are, of course, a variety of guidelines that can be used as a starting point for a cost benefit analysis and resource allocation. Chart 15, for example, depicts a possible approach to allocating resources among information activities. Ideally, one would like to know the marginal costs and benefits for additional information activities of various types by region and country. The problem, of course, lies in measuring the real impact. Perhaps exposure in the sense of the number of listeners or readers could be used as proximate measures. As crude as they are, these measures would still be better than thinking in terms of the number of copies of a pamphlet that are printed. Certainly we ought to be able to do as well in foreign affairs as the advertising agencies do in far less serious matters.

It may also be useful to consider the allocation of resources at the country level in terms of various agencies and activities and their contribution to meeting the stated objectives. Note that Chart 16 summarizes the total expenditures for the country, rather than in the country, because this is a more useful measure of the resources being devoted by the Canadian Government as a whole to meeting its objective in that country. A more detailed breakdown in terms of a specific objective is shown in Chart 17.

A general approach to the implementation of a programme — planning — budgeting system is shown in Chart 18. Please note that the definition of goals and objectives and the analysis of the costs and benefits of particular programmes is a continuing process and one which the results at any point in time must be treated as a working hypothesis rather than a final product.

Summary

My objective today was simply to indicate some approaches to the effective application of operations research in planning, programming, and budgeting for government operations. I wish not to overstate either the degree of progress that has already been made or the ease of extending this approach even further. These analyses are quite difficult to perform because they are concerned with some very fundamental questions. It is precisely for this reason, however, that this type of searching and probing analysis of objectives and programmes is, in fact, a very effective way of formulating and evaluating government activities.