## The Methodology of Planning: A Summary Statement\*

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In the paper under review, attempt has been made to develop a consistent methodology for planning in the context of any underdeveloped area, but using Pakistan's Second Five-Year Plan as a point of departure. The major findings derived from our analysis may be summarized as follows:—

Every plan must contain a certain number of key magnitudes or major economic variables such as income, consumption, savings, foreign aid, investment, imports, exports, etc. We have processed the key economic magnitudes scattered through several chapters of Pakistan's Second Five-Year Plan so that they form a consistent inter-linked national income accounting system. As a result we have identified some 50 planning variables related through approximately 20 national income accounting relations. While all such magnitudes appear in the Plan; the Planning Commission has not tied them up explicitly in the form of a national income accounting system. In the absence of this approach, an important function of planning that of checking the inter-dependence and consistency of Plan magnitudes—has been imperfectly executed. What may have been implicit in the Commission's work has been made explicit in our presentation.

A first advantage of giving formal and explicit recognition to the national income accounting framework on which any plan must be based relates to the checking of inconsistencies. A second advantage relates to the purpose of communicating the full content and implications of a plan to informed government officials and others. In our paper we have chosen a diagrammatic method of representation which we believe to be very effective in this direction.

(The most important reason for the use of a national income accounting system is that it provides the foundation for a more rigorous approach to plan-making. Every planning commission must recognise that in addition to the national income accounting system there are other economic relations which must be satisfied in the course of plan-making, e.g., the consumption function (a relationship between planned income and the planned availability of consumer goods), the capital co-efficient (a relationship between planned income or productive capacity and the development program), minimum tolerable increases in income, the maximum estimated availability of foreign aid, etc.) The totality of all possible economic conditions of this kind (which we have called the theory space) must obviously be considered by a planning commission if its plan is to be realistic in terms of the peculiar economic and non-economic conditions of a particular developing economy.

(Thus, a national income accounting system, together with a theory space (or shelf of economic conditions open to selection), provide us with all the neces-

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<sup>\*</sup>This is a brief and simplified summary of the major ideas contained in a monograph prepared by the authors as a research publication of the Institute. A Study of Planning Methodology with special reference to Pakistan's Second Five-Year Plan, Monograph No. 1 (June 1960). This work represents part of a continuing effort in the field of inter-sectoral relations and planning.

sary ingredients for successful plan-making. The prime function of a planning commission is to select the *one* locally suited program of development out of the many possible programs that can be constructed with the same choice of ingredients.

(In our paper we have shown that, relative to the national income accounting system adopted at least implicity by the Pakistan Planning Commission, and relative to the relevant theory space, there exist 69 possible development programs or planning choices of which the Commission's choice is but one. The recognition of the existence of such a wide range of alternative programs is probably the first step in the direction of improving the efficiency of planning methodology, since a conscious choice among many alternative planning procedure is thereby made necessary.)

In reading Pakistan's Second Five-Year Plan one finds it difficult to grasp the essence of the overall strategy of planning, i.e., the procedure and the rationale used in arriving at the data presented. There is no clear indication of what the politically or otherwise determined goals are and how the other Plan magnitudes are consequently determined. In other words, we are not sure whether the Planning Commission is aware of the existence of alternative planning procedures in general, and whether it can clearly define its own choice and methodology in particular. One can fairly point to the need for a defensible methodology which can be formally communicated to outsiders and serve as a basis for improved plan-making in the future.

(Closely related to this problem is the requirement of plan flexibility to accommodate various manifestations of uncertainty. For example, there may be a considerable increase or decrease in available foreign aid as compared with the magnitudes of the plan; similarly there may be a critical shortage of skills or materials leading to a shortfall in a particular sectoral program, e.g., transportation. The problem then arises as to how to revise a plan in the light of such uncertainties; this really involves the construction of a new plan. It appears to us that without a clearly defined procedure for plan-making such revisions or repairs can hardly be made efficiently and expeditiously.)

It is the purpose of our paper to focus attention on planning methodology so that knowledge gained in the explicit construction of a given plan can be accumulated and the search for improvements routinized.

As is well known, theoretical economists have developed powerful mathematical tools, such as linear programming, which can be used by plan-makers. The practitioners of planning, however, very often—and quite rightly—criticize such methods on grounds of non-availability of data and scarcity of the required human skills. The approach designed by us represents a half-way house. It does not require a great deal of mathematical sophistication and yet carries with it the logic and precision of a quantitative approach to planning.) It should be noted that this paper only communicates some of the initial results of our research, and that further work in this area is currently proceeding at the Institute of Development Economics.