Open questions in development planning

1 The laws of production

Development planning is a comparatively new branch of applied science, barely twenty years old in the West and fifty years old in the Soviet Union. In principle, it is concerned with the whole economy and even with a considerable part of society. It is hardly necessary to say that it is still an underdeveloped science and unable to provide an answer, or at least a full answer, to many of the questions that arise. Of course, no science is complete, and in any science new questions are always arising. There is, however, a difference in degree here, since very many important tasks still confront the development planner.

It would, of course, be impossible to make a complete list of all the open questions in development planning. To formulate and discuss the most obvious ones can, however, serve a useful purpose, not only in assisting planners in the task of preparing a research programme, but also in showing the relative importance of these questions and to what extent they have been answered. What I have to say in this chapter should be seen in this light.

I propose to give a number of examples of problems that have not yet been solved. Examples of the problems concerned with the fundamental relationships of planning will be discussed in sections 1 and 2 of this chapter, those relating to our knowledge of the optimum economic order in section 3, those bearing on the scientific treatment of the data in section 4, and finally, in section 5, those connected with planning procedure and organisation. In the terminology used in section 2 of chapter 3, sections 1, 2 and 3 of this chapter refer to the method of planning and section 4 refers to procedure and organisation, but they are, of course, very closely interrelated. There is no real need to discuss the unresolved problems of the function of the planning office, since that function has been given to it by the government.

As I explained in chapter 5, the basis of qualitative planning is the theory of welfare economics. The optimum welfare has to be founded on a basis of our knowledge of two sets of data – the laws of production and the scale of preferences shown by different

groups of people. I propose to discuss here certain open questions relating to the production laws. In principle, these laws describe the whole of the 'technology'. Development planning is in particular concerned with the problem of summarising this enormous complex of data by showing the scientific connection between the quantities of production factors used and the volume of the product to be obtained. In the literature of economics, this problem is known as that of production functions, and it has been the subject of intensive research in the past ten years. Considerable progress has resulted from the introduction of qualitative differences in the various kinds of personnel and capital goods that are of importance in production. The quality of the persons employed is determined above all by the educational process and that of the capital goods by the process of advancing scientific research. Many more data are, of course, needed on both these processes, and a far greater knowledge is required of the way in which an increase of the scale of output influences the techniques of production. It has only very recently been realised that quite different laws can occasionally apply here, for example, in the case of agriculture. Research is being done into more complicated relationships than those involved in the so-called Cobb-Douglas law, according to which it has hitherto been generally accepted that production possesses a constant elasticity with regard to each of the production factors. (For figures illustrating this, see appendix J.) These recent views have so far only been tested in the case of some countries with very reliable statistics. [8] [17]

Even if we have, for the time being, to be content with the simpler laws, it is necessary to bear in mind that there is still a great shortage of well-arranged and properly analysed data about the most important coefficients involved in these laws, such as the capital-output ratio. It has only very recently become apparent that a number of these coefficients need to be revised, taking international instead of national prices as our starting-point (see chapter 7, section 5).

Finally, we need to know much more about the so-called

external effects (see chapter 5, section 2), and about existing processes of production and other possible processes which are better suited to the requirements of the developing countries.

2 The preferences of groups of people

There are also considerable gaps in our knowledge of the human characteristics that affect the process of production and consumption. These aspects of human behaviour are expressed by economists in the so-called scales of preference, which not only show how man consumes or invests his income, but also provide details of his quality as a producer. All the open questions with regard to the human qualities needed for modern development (see chapter 1, section 2) arise to some extent here. I have already indicated that we know as yet very little about the relative importance to production of the human qualities listed there. A great deal of material, classifying men according to their productive qualities, is, however, becoming available. This is known as job evaluation. No proper classification of the qualities required for development has yet been attempted, since the main groups have not yet been analysed.

Another way of dealing with the open questions that exist here is to investigate the reactions of certain groups of people to the various incentives that can be used in a development policy, for example, tax incentives. Only a little research material about this is, however, available. [3]

It is important in welfare economics to know not only the preferences of individual persons, but also the preferences of groups of people. This raises at least two other sets of questions. Firstly, how should the utility of one person be weighed against that of another, so as to obtain the best possible picture of what may be called the communal or total utility. Among the questions that arise in connection with this are what is the best possible redistribution of incomes, and should decisions concerning this redistribution be taken by majority vote or in another way, for

example by a qualified majority, and if so, by what standards are we to judge this qualification?

Secondly, to what extent do certain persons – representatives, experts, those in government, and so on – know better than these others what is in fact good for them? We always act as if this is the case, but where are the limits and how are these limits to be justified? Comprehensive public opinion polls would no doubt help to provide a provisional answer at least to some of these important open questions.

3 Our knowledge of the optimum order

The optimum social and economic order (see chapter 5, section 1) can in principle be deduced from the data discussed in the first two sections of this chapter. For various reasons, it is, however, better to be satisfied with solutions that are 'second best' rather than to seek optimum solutions. This is especially the case when the ideal forms of taxation cannot be achieved. What, then, are the best known forms? As I have already said earlier on, there is a wide difference of opinion concerning these forms and especially with regard to the question as to how far taxation of property should play a greater part. It is important that discussions on this subject should be renewed. Meanwhile, until we are able to check the theoretical conclusions that we have come to about the optimum order, we can investigate other aspects of this order in a more direct and empirical way. These include the optimum extent of the public sector, the ownership of agricultural land and the optimum degree of decentralisation in government and administration. Further research into the operation of these institutions in a number of countries should contribute towards a more empirical appraisal, provided that the correct questions are asked. These will usually be the questions that have been acknowledged in theory to be relevant. Provisional answers can be obtained from opinion polls conducted by various experts in the scientific and the practical field – this constitutes the empirical element in this provisional method of investigation. Among the questions which should be asked about the operation of the public sector are whether the State industries are efficient from the point of view of business economics and whether enough is done to promote wider interests than those of the individual industries themselves. An example of what should be asked in the second case is whether prices have been determined so as to satisfy the demands of welfare economics, in other words, whether they have been based on marginal costs.

4 The scientific treatment of the data

Even if the situation is ideal and all the data that are required for a development plan to be prepared are available, a number of different questions are still bound to arise in connection with the treatment of these data. These questions are closely related to the subjects discussed in chapters 6 to 9 inclusive. I have already pointed out that the relationships are too complicated and the data too numerous for a plan to be prepared as if it were a coherent mathematical problem. I have therefore preferred the method of successive approximations and have described this method in the chapters mentioned above. It will, of course, be obvious that this is not the only method that can be chosen. Other authors and many practical men have favoured other approximations, and the question as to which of these approximations is the best is still being discussed. It is not simply a question of the choice of the principal stages in planning – in this book, the macrophase, the middle phase and the microphase – but also of a number of other approximations. Can, for example, transport costs be left out of the picture and replaced by the distinction made in this book between international, national, regional and other sectors? Can it be assumed that the demand for certain export products is unlimited, or must limits be set on this demand? Must investment projects be combined in bunches for a correct appraisal to be made? How many sectors and regions and how many different levels of education should be distinguished? Clearly, some of these questions can

be answered intuitively in each concrete case and at the same time some latitude left for differences of opinion.

5 The procedure and organisation of planning

I have already indicated the relationship between the mathematical structure of the problem of planning and the procedure and organisation of the planning process. All the unsolved problems in the first result in open questions in procedure and organisation. I have already pointed to many of the questions that have not yet been answered in connection with procedure and organisation when I discussed the subject earlier on in this book. It would not be out of place to reiterate some of them here.

Should the planning office be relatively small and collaborate a great deal with other authorities, such as ministries, public bodies at a lower level and private institutions, or should there be one large single organisation undertaking, as far as possible, all this work itself? What should be the status of the planning organisation within the government? How should the tasks and functions of the various departments be defined? In the case of international planning, how ought the authority of the central organisation to be chosen? How many levels should there be in the whole organisation, ranging from the world level to the local level?

It would not be true to say that we are completely in the dark with regard to all these questions, but there is a great deal of scope for different views and solutions. As I have already said, a considerable amount of important research has still to be done by experts in this branch of applied science. This, however, should never serve as an excuse for failing to cut through all the knots that stand in the way of a strong policy.