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**June 27, 1964
M-7966**

**Mr. David Mayer
Room 213, Sherman Building
1101 Fifteenth Street, N. W.
Washington, D. C.**

Dear Mr. Mayer:

In accordance with Contract No. AID/repas-9, Article 1,5,2, which requires the National Planning Association to submit progress reports semi-annually, I am presenting a review of the activities of the Development Planning Project during the period since our report of December 27, 1963. Much of this report is based on a document prepared for a recent meeting of the Project's Research Advisory Committee, attached as an appendix.

I. Staffing

No changes have been made in the professional staff since my last report.

II. Research Activities

The accompanying "Development Planning Project: Review for Research Advisory Committee" presents a description of the present and planned research activities of the staff. On the basis of this Review, the June 5, 1964, meeting of the Research Advisory Committee produced a number of recommendations concerning the scope and nature of the Project's research activities. Recognizing the research programs that are now being developed under new AID research contracts, the Committee seemed unanimous in the view that the present scope of the Project's research activities is too broad. The sense of the advice was that a limited number of research priorities should be specified and that the Project's efforts should be concentrated in these priority areas. We believe this advice to be sound, and we submit for the consideration of AID the question of whether or not a

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formal modification of the scope of the contract is required to enable the Project to narrow down its research activities to accord with the Committee's advice.

Our understanding of the Committee's advice on this issue implies that the following areas specified in the contract would be given priority and that the major part of the Project's future work should be concentrated in these areas:

A. A comprehensive, detailed survey and analysis of the present "state of the art" of Development Planning with respect to the economic and social development problems in underdeveloped countries, including an appraisal of experience with, and the literature on, the planning methods and techniques both in industrialized and underdeveloped countries (Contract Article I, 1, a).

The Committee clearly viewed this general evaluation as a major function of the Project. The Project was encouraged to survey literature in relevant foreign languages to the extent this is possible. (French literature, in particular, was emphasized.) There was agreement that the Project should include in this part of its efforts the present emphasis on attempting to classify countries, country plans and planning techniques so that specific country situations and planning approaches may be more carefully matched. There was also stress on the importance of empirical work to evaluate planning experience.

The projects in the accompanying Review given priority in this regard are: project #1, page 4, "Survey and Evaluation of Development Planning Literature;" project #4, page 11, "Country Typology and Planning Taxonomy;" and project #7, page 17, "Review and Evaluation of Project Planning Techniques."

B. Adaptation of techniques for making national accounts projections for use in long-range development planning in developing countries (Contract Article I, 1, b).

The Committee was agreed that the work now underway in this area was important. Efforts to improve and adapt techniques, as well as efforts to cope with underlying data problems (as described in project #3, page 8, "Aggregative Projection Techniques and Underlying Data") were endorsed by the Committee.

C. Integration of specific investment projects, local and regional activities, and functional programs into the long-range national development plan (Contract Article I, 1, d).

The Project's efforts to meet this responsibility have been cast in terms of sectoral planning as the link between the micro and the macro aspects of planning. The major project in this area is described in the Review as project #6, page 15, "Techniques for Planning Sectoral Allocation of Investment." Parts of project #12, page 25, "Development Planning and the Private Sector," are also relevant to this area of study.

D. Governmental and private planning (Contract Article I, 1, e).

The relevant project in this area is described in detail in the Review, project #12, page 25, and a detailed tentative outline of this project is presented as an appendix to the Review.

E. Research on improved techniques and better policy guidelines for development planning (loosely covered in Contract Article I, 1, c and d).

The Committee encouraged our continuing to work in the areas of improving techniques and policy guidance along the lines proposed in a number of projects in the Review: project #2, page 5, "Planning the Financing of Economic Development;" project #5, page 13, "Time Preference Aspects of Development Planning;" project #8, page 19, "Techniques to Cope with Special Planning Problems in Small, Open Economies;" project 10, page 23, "Effects of Errors in Aggregative Planning Models;" and project #11, page 24, "Non-Investment Policies for Implementing Development Plans."

III. Publications

An informal exchange of letters between the Project and AID resulted in agreement that results of the Project's research should be submitted to AID as working papers as the results emerge. Publication of these papers, revised to take account of our later work and AID's suggestions both on substance and form in which the results should be presented, will be mutually agreed upon. Working papers of this type which have been submitted to AID since my last report are:

Douglas S. Paauw and John C. H. Fei, "Statistical Implementation of the Fei-Paauw PMSR Model: Capital Inflow Requirements of Developing Countries," April, 1964.

Gerhard Colm, "Certain Aspects of Planning as a Tool for Social and Economic Development," April, 1964.

Bruce Edwards, "Time Preference and Development Planning: Screening and Selection of Projects," May, 1964.

Pierre R. Crosson, "Export Models of Economic Growth: Malaya, A Test Case," May, 1964.

The Research Advisory Committee's recommendations on publications focused on the desirability of adapting some or all of the Project's research results for training purposes. There were suggestions that the Project might find it useful

to survey training manual needs as pointed up by experience in the growing number of development training institutes. There was some emphasis on the importance of conferring with training supervisors in these institutes to determine the requirements, priorities, and the technical level for training manuals in the fields in which the Project is working.

IV. Technical Assistance

As I reported in my previous report, the services of Mr. Forrest Cookson were made available for planning assistance in Liberia under this provision of the contract. At the request of the Government of Liberia and with the concurrence of AID, the duration of Mr. Cookson's stay in Liberia was extended through March 15, 1964. Under a similar arrangement Mr. Paul Huber replaced Mr. Cookson in this capacity, serving in Liberia from March 15, 1964, through May 31, 1964.

The Project has continued to render several types of advisory services to AID at the request of various parts of that organization and with the concurrence of the Project monitor. The Project has also continued to assist the program coordination staff in developing a pilot-study proposal for applying aerial photography to specific problems in the field of development planning.

V. Field Work

From late April until early June Mr. Bruce Edwards visited a number of countries in the Middle East and Africa in connection with his project research. In mid-June Mr. Joseph Tryon left on a trip for field work in several Latin American countries. He is planning to return to Washington about August 10, 1964.

VI. Consultants

During the period under review, the Project added two consultants to the list of people previously submitted to AID: Dr. Mohamed Sadli, currently a research associate at the Center of International Affairs, Harvard University, and Dr. J. Price Gettinger, Associate, Agricultural Development Council.

VII. Survey of Institutions Conducting Research and Training in Economic Development and Planning

A first list of institutions conducting research on problems in the Project's field of interest was circulated to members of the Research Advisory Committee and other experts in early 1964. On the basis of suggestions received, an expanded and

revised list is now being compiled and will soon be ready for circulation. In addition, the Project is now in the process of surveying American institutions which offer training in economic development and planning.

Sincerely,

A handwritten signature in cursive script that reads "John Miller".

John Miller

Enclosure

**CENTER FOR DEVELOPMENT PLANNING
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DEVELOPMENT PLANNING PROJECT: REVIEW FOR RESEARCH ADVISORY COMMITTEE

(Meeting June 5, 1964)

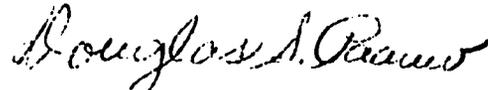
**M-7892
May 15, 1964**

Development Planning Project

Note to Advisory Committee Members

This document, prepared for the June 5th meeting of the Committee, reviews the Development Planning Project's current research program. In addition to presenting our views on the general types of research with which we are concerned, the document summarizes the specific research projects on which staff members and consultants are working or propose for the near future.

Most of the work we describe is still underway and can be shaped to take account of contributions made by Advisory Committee members. For this reason, we have indicated the stage of work reached by each project at the present time. In some instances the Committee's attention is directed to particular issues, but we do not wish to imply that this should limit the scope of the Committee's advice. We are equally concerned with the problem of effectively allocating our limited resources among the types of research approaches we describe and among the substantive areas outlined in the AID contract.



DOUGLAS S. PAAUW
Director
May 15, 1964

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GENERAL APPROACHES TO RESEARCH

The Development Planning Project's general approaches to its research responsibilities have grown out of the staff's coming to grips with the research work specified in the AID contract. (A copy of the Contract statement outlining project work accompanies this review.) These approaches have continued to follow the general lines set forth in the Research Agenda for Development Planning Project prepared for the Research Advisory Committee meeting of May 1, 1963. In that document we stated that "Our major goal is to provide an analysis and evaluation of development planning useful for dealing with actual problems of planning in less developed areas."^{1/} In accordance with this orientation our research work has been markedly operational in focus. The Project has been concerned with studying techniques to assist the planner in dealing with actual problems arising in the process of carrying out a variety of planning functions.

The approaches embodied in the Project's research work, therefore, are designed to meet the basic objectives presented in our earlier Research Agenda. These objectives were stated as follows: (1) To examine and evaluate the relevance of the existing literature on planning techniques to the problems confronting development planners; (2) To examine and, insofar as possible, to generalize from the experience of underdeveloped countries in dealing with key planning functions (such as mobilization of critical resources, project selection, and plan monitoring and control) to point up major problem areas in actual planning operations; (3) To develop improved techniques of plan formulation, implementation, activation and control appropriate to planning in the diversity of conditions found in less developed countries; (4) To indicate, on the basis of our findings, priorities for further research in the field of development planning.

In pursuit of these general objectives, and in designing the research program to meet the contract responsibilities, the Project has found it useful to distinguish among four types of research:

Type I: Survey and Evaluation of Existing Planning Techniques

Research of this type examines and evaluates existing planning methods from the viewpoints of the planning function the methods are designed to serve and their relevance to conditions actually found in less developed countries.

^{1/} National Planning Association, Research Agenda for Development Planning Project, April, 1963, p. 3.

Type II: Assessing Planning Experience in the Real World

Research work of this type is clearly empirical in orientation; it is one of the basic reasons for the high priority given to field work. Two general questions are given emphasis:

(1) To what extent are existing methods successfully applied in the less developed countries? A related question concerns the applicability of techniques now employed to the limited data and administrative capabilities of these countries.

(2) What areas have been most neglected in terms of availability of simple and useful techniques for operational planning functions?

Our empirical surveys have already pointed to recurring problem areas. In numerous countries we have found a felt need for improved tools to cope with such planning problems as (1) the relationship between long-run planning and annual budget; (2) the relationship between project, sectoral and aggregate planning; and (3) the relationship between foreign capital inflows and the future financial obligations they imply. This information is helpful for selecting studies concerned with the development of more realistic or new techniques for solving specific planning problems (Type IV Research).

Type III: Producing Realistic Parameters to Cope with Data Limitations

Given the pressing problem of data shortages, most development planners are forced to work with rough estimates for planning parameter values. Our work of this type is concerned with examining the possibilities of providing realistic values for planning parameters in specific situations. These values would be derived from collecting and analyzing the experience of countries which have relatively better data and assessing the applicability of such "synthetic" values to countries with varying development problems and underlying conditions.

Type IV: Development of Improved Planning Methods

Research of this type is specifically aimed at meeting deficiencies that are apparent from actual planning experience. The criteria for selecting projects of this type, therefore, are that (1) they must be directed at actual operational planning problems, (2) they must be problem-specific in approach, and (3) they must be designed to produce results from the limited data capabilities of less developed countries and relevant to conditions more or less typical of their societies.

In the case of quantitative research, simple models are emphasized; parameters used in the construction of models to solve particular problems must be capable of statistical estimation. It is the responsibility of authors of new or improved methods to demonstrate their relevance to less developed countries through

empirical testing. In the case of research concerned with qualitative problems, the researcher is obliged to draw upon relevant experience of less developed countries to demonstrate the realism of his qualitative hypotheses and conclusions and their usefulness to the planner.

All of our research work reflects one or more of these basic approaches. In total, they give the current work of the Project a rather distinctive focus, implied in the AID contract statement of work, but not specifically analyzed in these terms.

In the review of the specific research projects which follows, we note which type (or types) of approach the individual projects represent. The review of these projects indicates that a significant amount of research effort is being devoted to each type. It would be helpful to hear the Committee's advice on the relative usefulness of each of the types of research.

REVIEW OF RESEARCH PROJECTS

1. Survey and Evaluation of Development Planning Literature

All Staff

Objective

This general project constitutes the major effort in our Type I research area. When completed, it is expected that the result will amount to an overall evaluation of the "state of the art" of development planning as presented in the literature.

The objective is to review and evaluate the available literature by major categories relevant to operational planning activities. The staff have been working on a classification scheme based on an attempt to isolate relatively unique planning functions, but a final classification system has not been developed. It is clear, however, that the final result will be presented in major sections concerning such planning functions as aggregate projections, sectoral allocation of investment, project evaluation and selection, financing, harmonizing central aggregate plans with components, and policy planning.

Procedure and Progress

Each staff member has been given responsibility for covering the literature in his field of specialization. In addition, one member of the staff has been keeping a general file on development planning literature by major categories, and he will be responsible for reviewing literature in areas not covered by the specialists in particular sub-fields.

In the context of this general work, Forrest Cookson has been at work for some time reviewing literature in two major fields, aggregate planning methods and project evaluation and selection. The latter work is now nearing completion in the form of a manuscript being drafted by Mr. Tryon and Mr. Cookson, as described below. The survey of literature on aggregate planning is being continued to place the work already completed by Mr. Cookson in a broader perspective.

We plan to complete the remaining parts of this general survey near the end of the present contract period to enable specialists to include as many items as possible in their evaluation.

2. Planning the Financing of Economic Development

Douglas S. Paauw and John C. H. Fei

A. Foreign Assistance and Self-Help: A Reappraisal of Development Finance

Two papers have been completed and distributed on this subject: (1) "Foreign Assistance and Self-Help: A Reappraisal of Development Finance" and (2) "Statistical Implementation of the Fei-Paauw PMSR Model: Capital Inflow Requirements of Developing Countries." These papers and the further work proposed below represent our Type IV research approach which is concerned with improving planning methods. The orientation is problem-specific, and a simple operational model structure is employed involving parameters capable of statistical estimation.

The first paper presents the model structure, examines the qualitative and quantitative conclusions that can be derived from the theory itself and points to the policy implications deriving from the analysis. The second paper demonstrates the applicability of the model presented in the first paper by using data for a "pilot study" of 31 countries. The pilot study concept is an important aspect of our Type IV approach; such an application does not represent an exhaustive application of the method but rather points the way by showing how the techniques can be used to solve planning problems in the real world. Full-scale, detailed application, and continuous refinement of data for estimation of parameter values are left to planning agencies finding the techniques useful to solve their particular problems.

Our pilot study, a first approximation because of data limitations, suggests that many countries do not qualify for "gap-filling" assistance (in the terminology of our first paper). Domestic savings are not rising or are not rising rapidly enough to produce a finite termination date for required capital inflows, and hence these countries are termed "unsuccessful." On the other hand, the pilot study suggests that there are some countries ("successful") whose initial conditions would provide a reasonable termination date for required capital inflows if their per capita GNP targets are achieved in the short-run. In some cases, however, these countries are not currently receiving adequate external assistance to achieve their target. Hence, these "successful" countries are unable to raise their domestic savings as rapidly as they might, nor are they able to minimize their long-run foreign capital requirements.

The Committee's advice is requested on the desirability of proceeding somewhat further along these lines before we apply the basic model to analysis of selected domestic planning problems discussed below. We envisage two possibilities for extending the foreign assistance study: (1) a systematic examination of the alternatives which would move "unsuccessful" countries toward achieving finite termination dates - in our terminology, specifying alternative recommendations appropriate for gap-narrowing assistance strategy. (Computer runs have been made

on this problem but not analyzed.) This effort might also include an investigation of the sensitivity of projected domestic savings and required foreign assistance to changes in parameter values and, hence, to errors of estimation. (2) An examination of the alternatives open to "successful" countries currently not receiving the volume of capital inflow required for achieving a finite termination date by maintaining their specified growth targets.

B. Application to Domestic Planning Problems

The aggregative framework of the per capita marginal savings model as developed in the first paper makes possible a dynamic approach to the problem of development finance; i. e., it enables us to specify a truly dynamic time profile of domestic savings and the required inflow of foreign capital. It also permits inter-country (spatial) comparisons by simultaneously investigating development prospects of many countries on the basis of a few simple aggregate parameters.

In moving toward extending the model to problems of domestic planning, however, detailed attention to individual countries will involve a less aggregated approach. While disaggregation will give more realism for specific situations, it will also render international comparisons more difficult as well as make a fully dynamic analysis of the growth process less manageable. Disaggregation will be undertaken, therefore, to allow us to solve specific planning problems, but it will involve sacrificing some of the advantages of an aggregate model.

We are now considering the application of our model to three specific domestic planning problems: (1) planning changes in domestic austerity (e.g., taxation) to raise domestic savings; (2) examining the foreign exchange (as distinguished from the financial) bottleneck to development and (3) distinguishing between the agricultural and industrial sectors for deriving sectoral targets and perhaps for coping with problems posed by international trade.

To cope with the domestic savings problem, we propose first to disaggregate the economy's saving function between public and private sectors to determine if meaningful behavioral relationships can be established for each sector in particular types of situations. If data permit, further disaggregation of the private sector's savings function between households and producers could be attempted. Alternative possibilities and policy implications could then be specified.

The foreign exchange bottleneck problem arises because foreign and domestic savings are not fully substitutable from the standpoint of production. Foreign savings have the capacity to finance imported capital goods while domestic savings face limitations in this regard imposed by foreign trade constraints. Hence, a country might run into difficulty even though financial resources in the aggregate sense of our earlier model ($I = S + A$) were adequate to meet investment requirements. This problem can be solved only by incorporating the foreign exchange parameters in the model, and it may also be necessary to distinguish among productive sectors.

Disaggregation of the productive function between agriculture and industry will involve specification of production functions for each of these sectors. It will then be possible to plan investment allocation by sectors to achieve desired aggregate growth targets and to plan foreign exchange earnings in a more systematic manner.

There is a question of whether or not these three extensions of our model should be attempted separately or as a group of related problems. If they are to be analyzed separately, there is the question of the order in which they should be studied.

The method to be employed for these purposes would begin with the dynamic time paths of the variables (Y, C, S, I, A) already included in our aggregate model. ^{1/} This would provide a consistent set of aggregate data for a specified future target year, e.g., 1970. From this basic frame, additional numbers could be derived for the other, less aggregated, variables we wish to include, e.g., imports, exports, sectoral production conditions, and private and public savings.

We wish to emphasize again that disaggregation of these types would involve sacrificing some of the temporal and spacial comparisons that are possible on the basis of our aggregate model. The disaggregated variables would require a projective approach over time rather than a fully dynamic approach. For international comparison purposes, we would make an effort to keep our analysis simple enough (concentrating on relatively aggregated data such as total export and import volumes) so that some degree of international comparison would still be possible. An effort would be made, further, to apply our analysis mainly to countries on which the Project has concentrated its empirical work to enable us to unify our foreign assistance projections with domestic planning parameters. Our intensive work on Malaysia, for example, will enable us to coordinate our aggregate projections with detailed export and import projections being developed by Mr. Crosson.

^{1/} We note that Samuel Ho, in his study of a consistent Plan for Taiwan, has already made use of our projection of required foreign assistance, introducing this number in his system as an exogenous variable. We are considering requesting Mr. Ho to apply the wealth of data he has collected for Taiwan to problems we are concerned with.

3. Aggregative Projection Techniques and Underlying Data

Pierre R. Crosson

Within this broad subject category two specific research projects are now underway, and two more have been tentatively selected for future investigation. The advice of the Committee regarding the usefulness of the latter two projects would be appreciated.

A. Projects Now Underway

1. **Export-based models for projecting gross product.** The hypothesis that economic growth in areas strongly oriented toward foreign trade is dependent primarily upon the expansion of exports has been found very useful in regional economic analysis. We have undertaken a series of case studies to test the usefulness of this hypothesis in explaining the growth of export-oriented economies among the underdeveloped countries. The first of these case studies, dealing with Malaya, has been completed in draft form and circulated to the Committee for comment. Two or three additional studies will be undertaken of countries not yet selected. (Committee advice on countries for such empirical work would be helpful.) The set of case studies, when completed, will form the basis of a monograph dealing with the general subject of export-based models for making aggregative projections. This objective of the study and its empirical testing imply that it is an example of our Type IV approach to research (development of improved planning methods).

2. **Capital-output ratios in development planning.** Despite the widespread use of capital-output ratios in projecting aggregate investment requirements, there appears to have never been a systematic examination of the theoretical and empirical literature dealing with these ratios, particularly from the standpoint of their role in development planning. We have recently begun a comprehensive survey of this literature with two objectives: (a) to pull together what is known about observed capital-output ratios for as many countries as possible, covering as long a period as possible for each country, and (b) to investigate the changes over time in the ratios for given countries and the differences between countries at any given time.

We will look particularly at the effects of changes, or differences, in economic structure and of changes, or differences, in the rate of capacity utilization in explaining the behavior of these ratios. In addition, some attention will be given to the relation between gross and net capital-output ratios with the intent of demonstrating the conditions under which this relation will be a constant and those under which it can be expected to change in specified ways.

In critically evaluating the literature on capital-output ratios and evaluating their applicability to planning in diverse situations, this study represents the Type III

approach to Project research (producing realistic parameters to cope with data limitations).

B. Projects Tentatively Selected For Future Investigation

Because of the seriousness of the shortage and weaknesses of data for aggregate planning in many less developed countries, two additional studies are contemplated, both concerned with the problems described above under our Type III approach.

1. Foreign trade projections. Foreign trade projections generally play a vital role in development planning because foreign exchange availability is a major constraint to carrying out development programs. Yet data and analyses for making realistic estimates of future foreign exchange supplies and demands are rarely available to the planner confronted with these problems. Consequently, we have laid tentative plans for studying foreign trade projection techniques and the possibilities of providing more realistic data for these projections.

On the export side we propose to examine the price behavior of major primary commodity exports of the developing countries to determine with what confidence, if any, this price behavior can be projected for periods of 5 to 10 years. In addition, we will investigate supply elasticities of these commodities, particularly from the viewpoint of the effectiveness of deliberate policy measures in increasing supply.

On the import side, the study will concentrate on changes in the propensity to import in response to increasing income and changing economic structure. The focus will be both on aggregative imports and on imports of major categories of consumer, investment, and intermediate goods. One of the anticipated results of this study is some degree of insight into the effect of various import control policies on changing patterns of imports. This work, if undertaken, would be coordinated with the efforts of Douglas Paauw and John Fei to extend their model to the foreign trade sector.

2. The use of proxy and "synthetic" variables in development planning. The absence, or poor quality, in many countries of much of the critical data needed for development planning suggests that it may be desirable to develop data substitutes. We call these data substitutes proxy variables and synthetic variables. Proxy variables are those which are believed to move proportionately to some other variable which is the real focus of interest. For example, GNP may be a proxy for national income, or electric power production a proxy for industrial production. Synthetic variables are ratios or parameters drawn from the experience of one or more countries which are believed applicable to another country lacking data to estimate these ratios or parameters. Examples are capital-output ratios and income elasticities of demand for food commodities.

We propose to examine the feasibility of developing proxy and synthetic variables for five categories of data: aggregate output, food consumption, capital formation, labor productivity, and import propensities. In each case, an effort will be made to determine whether categories of data which are available can be reliably substituted for categories of needed data which are not available. This project would draw heavily on the work already underway on capital-output ratios and on the work tentatively planned on foreign trade projections.

4. Country Typology and Planning Taxonomy

Bruce E. Edwards

The major objective of this work is to provide a framework classifying and organizing special cases which occur in the development planning field. The absence of a general classification system has made it difficult to view planning in particular societies as a set of particular problems. A broad perspective is needed to allow conscious selection of development strategies, planning methods, and policy measures most appropriate to particular situations. In essence, this important task requires a judicious balance of all the Development Planning Project's research approaches to combine theory with knowledge about the real world.

A framework is being developed to apply to both the various theoretical models which have been developed and to the nearly one hundred countries for which models purport to be relevant. Any such classification scheme is based upon the definition of concepts and upon judgments regarding the relative importance of different items. For this reason all the research being done by the Development Planning Project necessarily overlaps with this work, and most of the staff have contributed preliminary working papers on some aspect of it. An attempt is being made to keep the classification framework flexible to enable us to make changes in the light of what is learned from the Project's general research. A consensus is unlikely to crystalize before the majority of the research work has been substantially completed.

Every classification scheme is inherently a conceptual construct. However, a complementary task is the compiling and tentative sorting of information on the objects to be classified. As indicated, some of these items are the existing less developed countries. A file has been set up on key-sort cards so that cross-country comparison can be made on a variety of easily available statistical variables. Using this, the countries have been divided into groups on a variety of bases. We have found it useful to think in terms of four major groupings; namely, (1) the four giants; i. e., Brazil, India, Indonesia, and Pakistan; (2) large non-giants - a group of eleven to fifteen countries depending on the criteria used; e. g., Argentina, Ethiopia, Iran, Korea, Mexico, Nigeria, Philippines, Thailand, Turkey, and U. A. R.; (3) fifteen to twenty medium-sized countries which have between six and sixteen million population and/or over one billion dollars of gross domestic production each; e. g., Algeria, Ceylon, Colombia, Malaysia, Morocco, Peru, and Taiwan; and (4) the remaining, smaller countries; e. g., Cyprus, Ivory Coast, Jordan, Liberia, Libya, and Senegal.

For a variety of reasons the group of large non-giants was chosen as the first group for more intensive investigation in the field. The giants were felt to be so big and complex as to warrant individual consideration as case studies; the smaller countries at the other end of the scale provided difficulties of definition and sampling; and the dividing line between the medium and small countries was less distinct than

the lines marking off the large non-giants.

Field work is under way during May 1964 in four or five of the large non-giant countries in the Middle East and Africa. The particular focus of this field work is on non-statistical aspects which, nevertheless, lend themselves to inter-country comparisons. One critical aspect being investigated is the role of the plan and the plan organization within the society as a whole, whether the organization is primarily a partisan in the power struggles which permeates every human society or whether it plays primarily a mediating role among the partisans. Emphasis is being placed on the procedure by which goals and targets are actually set in the plan and in the society. The empirical questions being asked are (1) whether, after due allowance is made for individual biases, an identifiable consensus will emerge in individual societies and (2) whether a useful classification scheme can be constructed which has a smaller number of classes than the number of countries being classified. The general problem concerns whether or not the a priori classification will in fact correlate with the perceived development strategies, planning philosophies, and planning techniques employed by countries within a particular "class".

Additional countries in the large non-giant group will be covered by further field work during the remainder of calendar 1964. The results of these investigations will be analyzed and interpreted during early 1965.

A few of the countries in the medium-size group will also be covered on a "convenience" basis. Hypotheses regarding the classification of medium-size and small countries will be generated as deviations from the final classifications used for the large non-giants. It will not be practical to subject these hypotheses to empirical testing before the present contract expires.

5. Time Preference Aspects of Development Planning

Bruce E. Edwards

In doing some of the preliminary work on the problem of classifying less developed countries for planning purposes, it became apparent that the way in which goals and targets were defined and set was going to be of crucial importance. An important aspect of setting these goals and targets is (implicitly or explicitly) specifying a time preference function for the society as a whole. Regardless of the relative strength of various pressure groups within the society, time preference is a purely subjective phenomenon relating the terms on which the society is willing to "trade" presently available consumption for future available consumption. This part of the problem has no right or wrong answers or parameters.

In looking for a possible way to investigate this problem, the idea of using revealed preference in the existing societies presented itself. This, in turn, led to a search for a simple model in which these revealed time preferences could be expressed. The existing literature on time preference and interest rates, although not exceptionally difficult, seemed intricate as far as computations were concerned. As a result of various investigations several simpler leads were developed.

A. Pre-Screening of Development Projects: An Application of the Time Preference Approach

One of the possibilities considered for making time preferences explicit has potential applications to special aspects of development planning; i. e., those related to making decisions with regard to specific projects and programs. After discussion with colleagues who were more directly concerned with project evaluation and selection the time preference leads were pursued, resulting in a first draft of a paper on "Time Preference and Development Planning: Screening and Selection of Projects." This paper, distributed in preliminary form to the Committee, exemplifies the problem - specific and operational focus of Project's Type IV approach (improving planning methods).

B. Further Applications

The time preference approach will be continued and maybe extended to other aspects of the development planning process to which this slant appears to be relevant for operational purposes. The time preference approach appears to offer the advantage of emphasizing the inherent interdependability of the various parts of the development process. The usefulness of this research lies in its striking in the direction of providing the planner with insights and tools to take this underlying interdependence into account.

While the major interests in this work will continue to focus on the ways in which goals and targets are set in existing societies in comparison to the ways they are handled in theoretical models, it is likely that opportunities for applying the basic concepts to practical planning problems will recur. To the extent this happens, the practical implications will be carried at least to the point where they are easily comprehensible to the Project personnel specializing in the other more narrowly defined areas. Possible further applications include (1) integrating annual budgeting and long-range development planning, (2) the choice of "accounting" prices for planning purposes, and (3) inter-temporal planning by means of projection techniques.

6. Techniques For Planning Sectoral Allocation of Investment

Joseph L. Tryon

A. Objectives of Study

The objectives of this study are threefold: (1) to establish the conceptual framework for sectoral planning, (2) to survey current techniques of sectoral planning, both as they appear in the literature and as applied in less developed countries, and (3) to investigate possibilities for improving current practices in this area. Work on the conceptual framework suggests that sectoral planning cannot be considered separately from either aggregate planning or project planning. The connection between the three planning levels will not be examined as a separate subject but will be covered wherever it is relevant in the three areas under study. This research project will bring to bear several of our basic approaches to research. Against the background of reviewing present techniques (Type I) and an evaluation of sectoral planning techniques actually applied in less developed countries (Type II), an attempt will be made to improve and adapt methods now available and/or in use (Type IV).

B. Research Procedures and Progress

Work has been proceeding on the problem of the conceptual framework, and brief preliminary papers have been circulated for intra-Project discussion. A survey of the literature on sectoral planning has been in process, and a first draft reviewing techniques currently used or proposed will be completed in June. This survey will be concerned with two general sets of problems: (1) problems of a general nature, usefulness and shortcomings for sectoral investment allocations of demand projections based on simple trend projections, income elasticities, Chenery-type industrial patterns, input-output, and import-substitution programs, and (2) discussion of the usefulness of linear programming and similar techniques for sectoral planning.

Some work on actual practice has been undertaken, but extensive field work is needed to establish what actual practice is. The preliminary work in this area has consisted of the examination of published country plans and interviews with knowledgeable experts in the Washington area. It is clear that this is not sufficient, and actual practice can be determined only by field trips. Work on devising improved methods for sectoral planning has been begun, but it is still at a rather speculative stage. Progress in this area will have to wait until more is known about actual practice.

C. Field Work

Field work in Latin America is being planned for June and July. Countries with relevant experience and definitely scheduled for study are Colombia, Venezuela, and Chile. Other countries being considered include Argentina, Ecuador, Peru, and

possibly Brazil. Intensive field work in other geographical areas is not now being planned, although it is expected that staff members visiting other areas will collect the sort of information needed to give a broader geographical sample.

D. Probable Results

Upon completion of the field trip and analysis of the results, a study on techniques currently used, incorporating the literature survey and field work, will be prepared. It is further anticipated that the research concerned with proposed improvements in sectoral planning methods will be completed by late 1964. Suggested improvements, however, may take the form of refinements in project evaluation, particularly methods for taking project inter-relationships into account. This sort of development may lead to better solutions of problems for which sectoral planning has been used in the past.

7. Review and Evaluation of Project Planning Techniques

Joseph L. Tryon and Forrest E. Cookson, Jr.

A. Objectives

This study has four objectives: (1) Development of a conceptual framework within which the problems of project planning can be studied. (2) Fitting existing techniques as described in literature into the above conceptual framework and investigation of the relevance and deficiencies of present procedures within this framework. Particular attention is to be given to the problems of allowing for the interrelationships between projects, the difficulties of the estimation of benefits from some types of projects, the difficulties of project planning when costs and benefits are uncertain, and to the use of time preference in project selection. (3) Collection of information on actual project planning practices, comparison of such projects with the theoretical ideal, and analysis of the implications of project planning practices for the development of better procedures for project planning. (4) Development of improved operational techniques for project generation, evaluation, and selection. Emphasis will be given to refinements for handling the four problems mentioned under the second objective.

While focusing heavily on a survey and evaluation of existing techniques (Type I research), therefore, this study also involves an assessment of the art of project planning as applied (Type II), and some attention will be given to simplifying and more effectively adapting methods to the major problems confronted in reality (Type IV).

B. Empirical Work

Empirical work, including field studies, is devoted primarily to blending Type II research into this study. An effort is being made to examine planning practices in enough less developed countries to determine which techniques have proven to be most useful and to test our hypotheses about the major problem areas in the field (see objective 2 above). Bruce Edwards will attempt to collect information of this kind in the Near East and Africa during his present trip. Joseph Tryon will investigate these problems in Latin America during his forthcoming trip (June-July, 1964), and future trips during which some field work of this kind can be done include those planned by Pierre Crosson (Thailand, Malaysia, Philippines, Pakistan, India) and Forrest Cookson (Mexico, Brazil, Costa Rica, Jamaica) later in 1964. In addition, Antonio Ayala, who is completing his Ph. D. work at Georgetown University and will soon return to the Philippines, may be able to review project planning practices in the Philippines as a consultant to this study.

C. Progress

A brief preliminary paper on the conceptual framework has been circulated to Project staff and is being revised following discussions with the staff. The survey and evaluation of project planning literature is well advanced, and a first draft of this part of the study will be circulated in the near future. A paper dealing with the third objective of the study (review of project planning practices in use) will be completed late this year. The final objective (development of improved techniques) will be completed near June, 1965.

D. Proposed Extensions of the Study (for Advisory Committee Consideration)

Two proposals for additional work are now under consideration, and the advice of the Committee is requested on their usefulness:

1. Simulation Study of Project Planning. For this purpose we propose to develop approximately fifty projects described by the relevant characteristics and select projects under different criteria in order to investigate the sensitivity of the selection to the various criteria. In addition, interrelations between projects, uncertainty effects, and time preference will be investigated within the simulation model. Apart from its value in giving us some guidance to the sensitivity of project selection with respect to various considerations, the resulting material would be valuable for training purposes.

2. Estimation Errors in Project Planning. We propose to explicitly investigate consequences of errors in estimating costs and benefits for the selection of projects. This can be done by exploring the size of errors which exist in projects actually carried out. Estimates of error sizes would be helpful to determine the degree of complexity of selection criteria that can be tolerated as well as for pointing to those parts of project evaluation which must be given the most careful attention.

8. Techniques to Cope with Special Planning Problems in Small, Open Economies

Forrest E. Cookson, Jr.

A. The Problem

In many developing countries a substantial part of gross national product originates in the export sector; this situation appears to be particularly characteristic of countries with relatively small populations, although some larger countries also fall into this category. The consequences of the heavy involvement in international trade, in some cases reinforced by the small size of the country, present a set of structural characteristics which create some special planning problems. These structural problems fall into two categories:

1. **Debt Service.** The importance of foreign capital in financing investment and borrowing from foreign sources of funds (either public or private) result in an essentially permanent drain on foreign exchange resources to cover profit transfers and debt repayment. In these cases policy toward private foreign investment and foreign loans become key planning problems. Hence, the planning framework employed should take explicit account of the interactions between borrowing or investment in one period and repayment or profit transfer in subsequent periods. In addition, care must be taken that the correct target variables - gross national product - rather than gross domestic product be utilized because of the large difference representing factor payments to foreign capital.

2. **Government Finance.** Countries of this type tend to have less maneuverability in mobilizing resources through government monetary action than more self-sufficient countries. The overriding importance of balance of payments stability limits the use of inflationary financing practices; moreover, the domestic sources of revenue and saving tend to be relatively narrow.

On the other hand, the costs of general government tend to be relatively large compared to total available resources in small countries. Economies of scale in government operations tend to be less than in larger countries, and a large part of current expenditures is devoted to general government operations. It follows that the capacity of the government to provide operating costs for new projects is limited, and overly-ambitious investment programs may cause long-run difficulties. It is important, therefore, that the problem of future operating costs of new capital facilities should be explicitly recognized as a policy variable.

B. Objective of Study

It is the objective of this study to develop a planning model to cope with the special problems of countries with these characteristics. From this model, techniques

will be developed (1) to systematically plan the future foreign exchange costs of present capital inflows and (2) to project the future operating costs implicit in alternative investment programs. After the theoretical part is completed, it is proposed that the model be tested with data from a few countries. It will be applied first to Liberia, on the basis of the author's recent experience. From this empirical work, relatively simple methods for solving the two major problems singled out here could be devised for use in less developed countries. It may also be possible to employ a standard computer procedure for exploring growth alternatives under these conditions. Countries with limited technical facilities could then make use of these results in some centralized location.

C. Field Work.

It is proposed to apply the model to several countries which may require field trips to collect the data. However, it is premature to decide which countries must be visited. The preliminary list of countries to which the model might be applied include the Philippines, Malaysia, Jamaica, Liberia, Ivory Coast, Cyprus, Costa Rica, Senegal, Libya, and Bolivia.

Mr. Cookson is just beginning work on this project. The Committee's advice would be especially useful, therefore, on the study's significance and feasibility as well as on the availability of data to establish the fundamental relationships between (1) present capital inflows and future foreign exchange obligations and (2) present investment programs and future operating costs. The data problem has been explored in a preliminary way, but no decision has been reached about the possibility of establishing realistic values for these parameters for planning purposes.

9. Annual Budgeting and Long-Run Planning

William I. Abraham

A. State of the Art

Since the inter-relations between the annual budget and development planning are many and complex, a survey is being made of the literature and of the experience of international organizations concerned with fiscal developments prior to selecting aspects meriting careful study because of their practical significance. An OECD conference on "Government Finance and Economic Development" held in Athens in December, 1963, and a United Nations Conference on "Annual Budgeting and Long-Run Planning" to be held in Copenhagen in September, 1964, are helping to crystallize ideas which are still largely at a formative stage. Preliminary indications suggest that future work at the Development Planning Project may profitably focus on at least two quite separate aspects. The first has to do with making the annual budget a more effective instrument for furthering the objectives of a development program. The second is concerned with budgets as a record of government action as distinct from paper plans.

B. The Budget as an Instrument for Development Action

Both economic and administrative issues are involved here, and both will probably have to be explored. Among the economic issues are questions relating to (1) the form which the expenditure side of the budget should take so that goals can be identified and progress gauged and (2) the yield and behavior of revenue items including the income-elasticity of different taxes, their relation to inflation, to saving and to incentives, unexploited revenue sources, and revenue projections.

The administrative issues are concerned with the procedures that mold the annual budget and the relationship of these procedures to the planning apparatus. Field studies of actual practices may suggest how more efficient coordination may be achieved.

C. The Budget as a Reflection of Policy Actions

This aspect may be split into two. In the first place, the extent to which countries effectively implement their plans and the particular fiscal instruments selected will be revealed by studying budgets in relation to plans. Such investigations will, as a rule, need to be carried out in the field.

In the second place, a cross-section study of government receipts and expenditures will establish norms of behavior and trends and will provide a body of empirical data useful in the study of various relationships. Internationally comparable data adequate for detailed analysis are not available in published form but special

regional collections do exist. In addition, steps are now being taken to devise a suitable international reporting system for use by AID, while the United Nations Statistical Office is reexamining its national accounting system with particular attention to the public sector. Thus while analysis of fiscal data would have for the present to be confined to a carefully selected sample, a broader view of detailed fiscal developments may become possible later.

While the scope of work undertaken to the present has been limited mainly to assessing the present state of the art in this field from the literature (Type I approach), we envisage the possibility of field work to provide information about actual practice (Type II). With guidelines from empirical work of this kind, it may be useful to work toward improving techniques for both purposes described above (Type IV).

10. Effects of Errors in Aggregative Planning Models

Joseph L. Tryon and Forrest E. Cookson, Jr.

This study is being undertaken to investigate the effects of errors in data, in parameter values, and in the relationships specified for aggregative planning models. Aggregative models of a wide variety have been proposed for solving various planning problems. Clearly it is dangerous to use a model for policy guidance if the effects on target variables of various types of errors in the model are larger than the effects a given policy might achieve. It would be impossible to determine the success or failure of such a policy in these circumstances. Unfortunately current work on such models has practically ignored this problem. This study will provide some guidance for determining the limitations of a few selected models for policy decisions. It will also show how the errors within the system set definite practical limits on the complexity of a model. Finally, it will give guidance on which types of data improvements would be most beneficial for aggregative model purposes.

The study will investigate the effects of various types of errors along three lines:

- 1. A brief theoretical analysis of the effect of errors on simple aggregative models. This analysis will consider the various types of errors, the possibility of auto-correlated errors in observed data and projections, and the possibility of inter-relationships between errors.**
- 2. An examination of the probable size and nature of errors in the sort of economic data used in aggregative models. A small amount of information on this point is available in published form. Further information is being developed from the analysis of various published country development plans.**
- 3. A simulation study using several models which are now in existence. For this purpose, the model of Israel by Hollis Chenery and Michael Bruno, the model of the Philippines by Antonio Ayala, and the savings model by John Fei and Douglas Paauw will be used. The Ayala model is partly programmed for computer runs, and work on it is progressing. A number of computer runs of the Fei-Paauw model have been made for other purposes, and they can be readily used for the error study. Examination of the Chenery-Bruno model will be undertaken after work on the other two has been completed.**

11. Non-Investment Policies for Implementing Development Plans and Programs

Paul B. Huber

Mr. Huber joined the Development Planning Project in September, 1963. He had been at work in Washington for only five months when his services were requested by AID for a short term assignment in Liberia. He plans to rejoin the Project in June.

In his short period of service with the Project, Mr. Huber had concentrated on preliminary reading and exploration in his field of interest. His general research work is concerned with adapting non-investment policies (those which do not directly relate to capital expenditures) to achieving economic goals and plan objectives in less developed countries. He proposes to construct a conceptual framework appropriate to investigating policy problems in this context, while also examining how these problems have been treated in practice.

Specific policy areas most significant for development will be studied intensively, beginning with international economic policy. In this area, Mr. Huber proposes that such concrete policy problems as foreign investment promotion, policy toward foreign enterprise, tariffs and exchange rate and exchange control policies be studied in the broad perspective of development strategy and plan objectives.

12. Development Planning and the Private Sector

Theodore Geiger and John C. Honey*

A. Objectives of the Study

This study is based upon two assumptions: (1) that in most societies a development plan covering the economy as a whole is more effective for promoting economic development than one covering only the public sector, and (2) that private enterprise (defined broadly to include the various types of nongovernmental economic activity) is a desirable and effective form of economic organization for achieving national development.

The objectives of the study are (1) to ascertain the specific ways in which selected less developed countries take account of the private sector in the preparation and implementation of development plans; (2) to illuminate the conceptual and operational problems and implications for development planning as a whole arising from the preparation of - or the decision not to prepare - quantitative estimates, projections or targets for the private sector; (3) to explore the operation and consequences of specific government policies and programs designed to influence the performance of the private sector under development plans; and (4) to evaluate the comparative effectiveness of different techniques of planning for and by the private sector, of various methods of organizing the participation of the private sector in development planning, and of the variety of policies and programs for stimulating and assisting the private sector to improve its contribution to national development. Accordingly, the research and analysis can be classified under Types I, II, and IV. The work is closely related to several other studies being undertaken by the Development Planning Project, particularly those on techniques for planning the sectoral allocation of investment, aggregative projection techniques, project planning techniques, and non-investment policies for implementing development plans.

The countries selected for study are those which both engage in development planning and have a private sector of actual or potential significance. These include Colombia, Greece, India, Iran, Israel, Malaysia, Nigeria, Peru, the Philippines, Taiwan, Turkey, and Venezuela. Possibly two or three others (e.g., Pakistan, Chile, East Africa) will eventually be included.

*** Owing to his absence abroad, John C. Honey has not had an opportunity to review this progress report.**

B. Field Research

Field research has already been undertaken in India, Iran, Israel, Malaysia, Nigeria, Peru, the Philippines, and Turkey, and it is anticipated that the remaining countries will be visited before the end of 1964. In addition, brief visits have been made to a number of developed countries engaged in national economic planning - notably France, Japan, and the United Kingdom - for comparative purposes.

In each country, interviews have been conducted with government officials in planning agencies and ministries responsible for policies and programs affecting the private sector; with leading private entrepreneurs and associations and organizations of the business community, of producers cooperatives, etc.; with U. S. government, U. S. private business and professional, and international organization personnel stationed in the country; and with local university and professional people. In addition, efforts have been made in each country to collect as many as possible of the governmental and private publications and other printed materials dealing with the subjects covered by the study.

A tentative outline of the main problems to be covered in the written report emerging from this study is presented in the Appendix to this Review. The Committee's comments on the proposed outline are invited.

13. Aerial Photography and Development Planning

Douglas S. Paauw and Forrest E. Cookson, Jr.

While our interest in this field should not be described as a research project, the Development Planning Project has been assisting various groups at AID in exploring the potential usefulness of aerial photography to development planning. The objectives of this preliminary work have been (1) to specify the areas in which aerial photography is most likely to have a comparative advantage for solving pressing planning problems promptly and economically and (2) to formulate proposals for pilot studies, presumably to be undertaken by other groups, for testing the feasibility of using aerial photography for specific applications to planning problems.

The Project has consulted with companies specializing in aerial photography as well as with individuals and agencies with wide experience in applying aerial photography for objectives closely related to our own. Several informal meetings have been convened to bring together participants representing a variety of experience and viewpoints. A paper entitled "Aerial Photography and Development Planning" was prepared for discussion at a meeting held on December 2, 1963. Following this meeting, it has become increasingly apparent that application of aerial photography to data and planning problems in the agricultural sector of less developed countries offers the best prospects for a first pilot study.

Several possible sites for undertaking a pilot study of this type have been considered, and within recent weeks a preliminary decision has been made to explore the possibility of launching a field study in the Eastern Region of Nigeria. While Mr. Cookson was in Africa in early 1964, he visited this region and found considerable local interest in the possibility of experimenting with the application of aerial photography for data collection in the agricultural sector. He also found that the Eastern Region of Nigeria offers several unique locational advantages for carrying out a pilot study of this kind.

On the basis of the Development Planning Project's background and interest in the application of aerial photography to development planning, the Project would envisage a limited consulting role in promoting the effective organization and execution of such pilot studies. While studies of this type do not fall within the Project's basic research responsibilities, it is believed that specialists concerned with development planning should be included in an advisory role to assure that the data framework is appropriate for planning purposes and to suggest possible direct applications of aerial photography to planning. The Project's interest stems from the hope that aerial photography may provide a breakthrough in solving several types of data problems which have almost universally hampered effective plan formulation and execution in less developed countries.

14. Other Studies

Two other studies are being conducted by consultants. Nanda Choudhry of the University of Toronto is in the process of reviewing Indian experience with implementing plans and executing projects. While recently in India on a National Science Foundation grant, Mr. Choudhry investigated these problems on the spot, and he is now preparing a manuscript presenting his findings. It is hoped that this study will assist the Project in identifying major problems of plan implementation which would be appropriate for further research.

In consultation with the Project, J. Price Gittinger of the Agricultural Development Council has been preparing a manuscript concerned with agricultural planning. The study is largely based on experience acquired by Mr. Gittinger while working on this problem in Iran as a member of the Harvard Advisory Group. The importance of planning for agricultural development has been generally neglected in national development plans, and the literature is sparse. Mr. Gittinger's study will help to fill the void by analyzing the problem of systematically integrating plans for the agricultural sector into a national development plan, including a discussion of the administrative, technical and data aspects of the problem.

PRELIMINARY PAPERS CIRCULATED

1. Staff, "Aerial Photography and Development Planning," November, 1963.
2. John C. H. Fei and Douglas S. Paauw, "Foreign Assistance and Self-Help: A Reappraisal of Development Finance," December, 1963.
3. Douglas S. Paauw and John C. H. Fei, "Statistical Implementation of the Fei-Paauw PMSR Model: Capital Inflow Requirements of Developing Countries," April, 1964.
4. Gerhard Colm, "Certain Aspects of Planning as a Tool for Social and Economic Development," April, 1964.
5. Bruce Edwards, "Time Preference and Development Planning: Screening and Selection of Projects," May, 1964.
6. Pierre R. Crosson, "Export Models of Economic Growth: Malaya. A Test Case," May, 1964.

Appendix: Tentative Outline of Development Planning and the Private Sector

Theodore Geiger and John C. Honey

Based upon the reading and field research and the authors' discussions to date, it is possible to present a tentative outline indicating the main subjects and questions to be covered in the study, though not necessarily in the order or with the relative emphasis they will be given in the final report.

A. The Nature, Scope, and Methodology of Development Planning, Particularly With Respect to the Private Sector

All of the countries studied so far have, or are in process of preparing, development plans covering periods of four or five years. These range in scope from lists of public sector investment projects to comprehensive plans balanced within an aggregative national accounts framework and including detailed projections (Israel) or specific targets (India) for industry groups or industrial products representing the bulk of anticipated or desired new investment and increased output in the private sector. Similarly, methods for allocating investment among projects and industries show wide variations. In some cases the methodology largely consists of haphazard inclusion of public sector investment projects believed desirable and practicable on intuitive or political grounds; in other cases, fairly sophisticated and reasonably objective cost-benefit analysis and other project evaluation techniques are employed. Finally, some countries attempt to prepare interindustry matrices and, in a few instances, to make detailed studies of future demand patterns and technological changes in a number of key industries. In the main, however, industrial projections or targets are estimates of output possibilities and are not based upon analysis of future demand patterns.

The study will describe the types of planning actually being undertaken in the various countries selected for investigation. Analyses will be made of the interrelations between public sector and private sector planning; of the implications for the quality and effectiveness of the plan as a whole resulting from treating the private sector as a residual or, alternatively, of estimating specifically claims on development resources arising from the future growth of private industry and of other private productive activities; and of the relative advantages and disadvantages of the various methods of private sector planning.

B. Government-Private Relationships in Development Planning

In all countries studied, the government (e. g., the planning agency, the ministry of industry and commerce, etc.) is dependent upon the private sector for data regarding specific industries and for estimates and analyses of future growth

possibilities. A variety of organizational arrangements are employed for obtaining such data and analyses from the private sector ranging from ad hoc contacts to formal industry committees and working groups on which the private sector is represented. While the French system is often explicitly cited as a model, in no case do the functions of these industry committees or working groups approach those characteristic of private participation in French planning. In countries where private sector representatives serve on industry committees, they are limited to providing the government agencies concerned with data on such planning variables as future output possibilities, technological changes and capital investment requirements. Less often, the private sector also provides data on the required inputs of labor and similar factors, and foreign trade and foreign exchange implications of future levels and composition of production in specific industries, and on technical and other special problems of particular industries. However, not even in India are the private sector representatives encouraged or permitted in these official committees or working groups to comment upon the broader interindustry and intersectoral consistency of the plan, on the implications for their own particular industries of the plan as a whole, on the adequacy of the public sector planning, and - most important of all - on the kinds of governmental policies and programs required to enable the private sector to maximize its contribution to national development. Such general commentary and review by the private sector of the development plan usually takes place outside these formal government-private relationships, and, hence, may not be adequately taken into account by the government in the final revision of draft plans and sectoral programs.

This part of the study will describe the kinds of data and analyses obtained by government planning agencies from the private sector, the various arrangements by which this information is made available, and the uses made of it in the planning process. Attention will be directed particularly to assessing the capabilities both of government personnel and of the private sector to provide and utilize effectively the data required for private sector planning. The authors will also investigate the implications for the realism of the plan, for plan implementation, and for the motivation of the private sector of the limited scope of private participation in development planning in the countries selected for study.

C. Government Policies and Programs Affecting the Performance of the Private Sector in National Development

The countries studied employ some or all of a wide variety of policies and programs designed to influence the performance of the private sector in implementing development plans. These include investment licensing, foreign exchange rationing, materials allocations, price controls, loans and subsidies, tax incentives, tariff protection, industrial estates, export promotion drives, business regulations, technical assistance programs, productivity and investment centers, small industry programs, encouragement of private foreign investment, etc. Most of these instruments, and particularly the direct control devices, require considerable administrative capacity on the part of the government agencies concerned. This in turn presupposes that

suitably trained personnel, willing and able to take the necessary initiative and responsibility and to make reasonably objective and rapid decisions, are available in adequate numbers. Certain minimum standards of business and civic morality on the parts both of the private sector and of the government bureaucracy are also required.

The study will describe the main types of government policies and programs used for influencing the performance of the private sector in national development. An effort will be made to assess the consistency between the particular policies and programs chosen by the countries selected for study and their general development strategies and specific development objectives. Based on country experience, the study will also explore the consequences, intended and unintended, of the use of the major types of devices, and will endeavor to define the particular circumstances in which each is likely to be effective and appropriate.

D. Obstacles and Difficulties Inhibiting More Effective Private Sector Participation in Development Planning and Implementation

In the countries selected for study, a number of obstacles and problems can be identified as impeding more effective private participation in development planning and national development. With respect to the government side of the government-private sector relationship, the major problems are inadequate planning methods and lack of qualified planning personnel; administrative incapacities arising both from the scarcity of trained personnel and from the persistence of attitudes and procedures which inhibit initiative, responsibility and rapid and objective decision making; and the pressures of politics, patronage and corruption on development decisions. Though prevalent, ideological antipathy to private enterprise and doctrinaire refusal to encourage or permit private participation in official planning are less significant than was expected, and an increasingly pragmatic attitude seems to be spreading among political leaders and government officials. With respect to the private sector side of the relationship, the main deficiencies are narrowness of outlook and insufficient technical competence, lack of dynamism and persistence of traditional static business attitudes and methods, and preference for making advantageous individual arrangements with government officials by the use of influence or bribery. Again, there appears to be very little private sector antipathy on ideological grounds to development planning; in fact, the great majority of private entrepreneurs interviewed in Asian and African countries (though it probably would not be true of Latin America) favored government planning. Some favored direct controls to implement planning decisions, though usually these were entrepreneurs enjoying special market and investment advantages in consequence of such restrictions.

The study would analyze the nature of these and other problems inhibiting more effective private sector participation in development planning and national development, and would endeavor to determine their causes, importance and possible remedies.

E. Substantive and Policy Issues

It is clear from the foregoing that experience to date in the countries selected for study raises a number of important substantive and policy issues with respect to development planning and the private sector. These include:

1. To what extent and in what circumstances is it desirable and practicable to program in detail the economic activities covered by the private sector which make significant claims upon scarce development resources?

2. Does the implementation of specific projections or targets for the private sector require direct controls (such as investment licensing, foreign exchange allocation, price control, materials rationing, etc.) or can development objectives be achieved within tolerable limits by greater reliance upon the market mechanism, reinforced by appropriate incentives and assistance (such as tax policy, loans, etc.)? In what circumstances are these two types of implementation devices appropriate? Can they be combined and harmonized so as to minimize their adverse effects?

3. How extensively should the private sector participate both in development planning and in the implementation of development plans? Will greater participation by and encouragement of the private sector in time strengthen its capabilities to engage in the process of development planning and to enhance prospects for its entrepreneurial performance and to contribute to national development? Conversely, would greater private participation in development planning foster greater realism and effectiveness in government planning and ease the difficulties of plan implementation? What types of organizational arrangements could assist in achieving these objectives?

The study would discuss the pros and cons of these and other substantive and policy issues in the light of the experience in the countries selected for investigation.