THE INTEGRATION OF PHYSICAL PLANNING WITH SOCIAL AND ECONOMIC PLANNING: PLANNING FOR DEVELOPMENT IN TRINIDAD AND TOBAGO

by

KENNETH BERTRAM SNAGGS
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We accept this report as conforming to the standard required from candidates for the degree of MASTER OF SCIENCE

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Members of the Department of Community and Regional Planning

THE UNIVERSITY OF BRITISH COLUMBIA
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Department of **Community and Regional Planning**

The University of British Columbia,
Vancouver 8, Canada.

Date **May 10th, 1961**
ABSTRACT

Planning for development as a function of central government forms the general subject of this study. The purpose of the study is to demonstrate the hypothesis that, to be effective, such planning must be comprehensive in approach, that is, economic, social and physical planning must be integrated into one total process.

Trinidad and Tobago, a territory of the West Indies Federation, is taken as an illustrative case study. The case study focuses on the more practical aspects of the problem and is meant to indicate how the different elements of the planning process could be integrated into one comprehensive system and be effectively applied to development.

The approach taken in the study was, first, to discuss the problem in a general way by analyzing and evaluating planning for development as it is currently practised in a number of developing countries.

The conclusions drawn from this analysis are that (1) planning for development as currently practised tends to emphasise the economic aspects of the development process, and ignores the social and, in particular, the physical aspects of development; and (2) while the planning function is rightly placed at the centre of the governmental structure, there is the tendency to concentrate only on the national level of development ignoring the implications of national policy on regions and local
areas, and failing to give adequate recognition to the aspirations and requirements of these lower levels in development plans.

It is further concluded that as a result of the above serious defects appear in development programmes: because of the lack of functional integration in the development process unexpected costs arise which may nullify the desired benefits; unplanned physical effects of development appear as the determinants of the ultimate success of the entire development effort; regional disparities in the settlement pattern and in the level of development are perpetuated; human, physical and financial resources are dissipated in costly and unnecessary remedial measures; and, the social benefits of development tend to be offset by the social costs.

The shortcomings of current practice of planning for development and the resultant defects in the development effort, appear to be related to the conception of the nature of development that is generally accepted, that is, that development is largely a problem in economics and that all other elements will fall into place once the economic components are properly planned and rapid economic progress achieved.

The revised conception of development as a complex series of interdependent changes in the society as a whole, leads almost naturally to the view that planning designed to promote development must be comprehensive.

The brief outline and discussion of the important factors in the development of Trinidad and Tobago, focusing on the
magnitude and the scope of the needs, provide the background for the consideration of the planning requirements in this territory.

It is concluded from this discussion that Trinidad and Tobago needs a comprehensive planning organization which includes economic, social and physical elements to meet all the requirements of the anticipated development in the territory. The proposal for the planning organization is based on the general planning philosophy which emerges from the discussion of current practice in developing countries and from the appraisal of the comprehensive planning system in operation in the Commonwealth of Puerto Rico.

The basic features of the proposed planning process and organization are as follows: (1) the planning process is divided into five stages -- policy, survey and analysis, design, control of development, and evaluation; (2) co-ordination of all functional elements is to be maintained throughout the process; and, (3) spatial integration is to be achieved by making the Central Planning Department responsible for planning at all levels -- territorial, regional and local.

Approved:

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The subject matter of this thesis is the outgrowth of a number of influences. My personal background of living and working in Trinidad and Tobago, one of the small, densely populated territories of the West Indies Federation, which has recently undertaken the conscious and formal commitment to develop, was the logical starting point in the search for a suitable topic.

A special interest in the problems of development, and the intention to work in this field in Trinidad and Tobago provided the impetus for the study of the planning function as applied to development, within the framework of Government. The provocative article by Haar, Higgins and Rodwin entitled "Economic and Physical Planning: Coordination in Developing Areas," suggested the focus on the major theme, the problem of integrating the physical aspects with the social and economic aspects in the total process of planning for development in Trinidad and Tobago.

The Central Government of Trinidad and Tobago has accepted planning for development as one of the regular functions of government. Hence, it was felt that one objective of the study could be to produce some practical contribution to the development process there. It was therefore decided that the final product of the study would be a proposed organization for planning for development specially adapted to the existing structure of Central Government there. This provided the orientation and

*Reference No. 17, Chapter I, page 47.
overall purpose.

The purpose behind the study gained added importance in the light of the new Town and Country Planning Ordinance enacted in the latter half of 1960 by the Legislature of Trinidad and Tobago, which makes provisions for powerful and far-reaching physical planning and control of development. The provisions of this Ordinance must be exercised by some form of governmental organization. It is pertinent, therefore, to explore methods for integrating and incorporating this function into the present organizational structure of Central Government.

The combination of these various influences, then led to the formulation of this study whose purposes are as follows:

(1) to demonstrate the hypothesis that a comprehensive approach to planning for development is needed, when development is viewed as a complex phenomenon involving economic, social and physical elements; and (2) using Trinidad and Tobago as an illustrative case study, to demonstrate the need for and to propose an organization to carry out the comprehensive planning function within central government.

In pursuance of the first purpose the scope of the discussion has been limited by the availability of material and by the nature of the countries in the category of "developing country." In the context of the study this classification applies to countries which have comparatively recently gained a large measure of self-determination and are therefore in a position to influence the course of their own development. This includes former colonies in South and Southeast Asia, in Africa -
south of the Sahara, and in the West Indies. Two other countries with dissimilar histories can technically be included in the category - the State of Israel and the Commonwealth of Puerto Rico.

The difficulty and danger of classifying such widely differing countries according to one consistent set of criteria are immediately realized. However, within the limits prescribed for the study the inclusion of the above countries seems acceptable.

It is to be noted that countries under a Communist system of Government have been excluded. This includes Mainland China which may be cited as the prime example of a developing country today.

It appears from the material available in scattered references that even under this system of Government where highly centralized planning is practised, many of the more serious problems to which planning for development is subject are also experienced. The following comments indicate that in some of these countries regional disproportions, imbalance in development, and lack of co-ordination also appear as undesirable features of development which the centralized planning systems have failed to eliminate.

Stefan H. Robock in a comment on planned economies says this:

Even the Communist countries with their central planning approach are not exempt from regional development problems. According to a recent news story in the New York Times (Nov. 18, 1959), Yugoslavia's Communist leadership is seriously concerned with regional disparities - despite glowing reports of overall progress in the Yugoslavia
The USSR in its Seven Year Plan announced in 1959, recognizes that 'An important task of the USSR in the forthcoming seven year period is that of . . . improving the distribution of productive forces on its territory.' And, even more significantly, the Soviet Union in 1956 decentralized its planning activities through the establishment of 114 regional planning councils across the country.1

E. Stuart Kirby commenting on economic planning in Communist China writes:

The (Five Year) Plan, . . . was not an extremely elaborate one. Apart from directives for the complete socialization of all activities, by bringing them under either full nationalization or 'joint public-private' management, it is virtually a list . . . of specific gaps in the essential substructure which would be filled to provide, first, the preliminary basis for the full industrialization of China. It involved co-ordination, 'phasing', or interlocking only in the most general sense; broadly speaking, each individual project in the list was largely fulfillable in itself, regardless of the condition or rate of accomplishment of all the others. The Plan consisted essentially of a schedule, on these lines, of some five hundred major projects.2

On the other hand the problem of integrating physical planning with economic planning appears to have been successfully solved.

Robert Allen in his discussion on two papers on the Empirical Analysis for Underdeveloped Areas made this comment on the type of planning in the USSR.

The USSR may well be cited as an example of a centrally planned economy which has reached the ultimate in the type of planning in which regional and urban consideration form an essential ingredient of the national plan.3

He concludes his comment on the question of imbalance of investment by saying that the Communist countries can achieve their solution "only by adapting political forms and a degree of planning which are repellant in general to most underdeveloped countries".4
A note on the material used in this study is relevant. In order to focus as quickly as possible on the major problems of current practice of planning for development, use was made of several critiques and evaluations of the planning process in developing countries by expert commentators, published over the last few years. Hence no specific or detailed discussion of development plans are made, rather attention is focused on the approach and the content of the planning function as revealed from the results arising out of the application of planning to the development process.

The appraisal of the planning process in Puerto Rico is based on adequate and reliable data published by Puerto Rican sources and endorsed by the commentaries of independent observers.

Data on Trinidad and Tobago is drawn almost exclusively from Government publications plus a few minor sources on the general area of the West Indies. These data are supplemented by my personal knowledge of the Trinidad and Tobago scene gained during a period of four years, 1955 to 1959, while working in the Government Service there. In addition, discussions with different Government Officials during a brief visit in the Summer 1960, provided a deeper insight into the problems of development and the current efforts at planning for development.

Virtually no published material specifically dealing with the planning function in Trinidad and Tobago exists. Consequently, evaluation of the process amounts to an interpretation of the Five Year Development Programme - the major product
of the planning agency at Central Government level, and an assessment from it of the planning approach which was applied in its preparation. In addition, I have been able to draw on my impressions gained through participation as a Government official in one of the key departments (Works) and my discussions with other officials concerned either with planning or implementation of development.

To the extent that the officials involved in the planning process in Trinidad and Tobago have not recorded their ideas on the matter or stated their basic principles, nor outlined the practical problems and special conditions which might have influenced the final product, the evaluation lacks documentation. However, particularly in its organizational aspects, and having regard to the fact that planning for development is in its infancy in Trinidad and Tobago, there is sufficient data to document and lend validity to this aspect of the study.

Acknowledgement is made of the material supplied by the Puerto Rico Planning Board, the Information Office of the Government of Trinidad and Tobago and the Industrial Development Corporation of Trinidad and Tobago.

Acknowledgement is made to Professor H. P. Oberlander, Head of the Department of Community and Regional Planning, for his advice on this study and his assistance throughout the course of my planning studies; and to Miss M. Dwyer, Fine Arts Librarian, for her assistance. Special acknowledgement is paid to Professor Ira M. Robinson of the Department of Community and Regional Planning, University of British Columbia, whose valuable
criticism and advice, constantly and freely given during the writing of this thesis, greatly assisted the writer in completing the study.

REFERENCES


4Ibid.
INTRODUCTION

Most studies dealing with the developing countries start with a definition of terms. This is necessary because of the ambiguities which surround such terms as 'development', 'developed', 'underdeveloped', and 'advanced' when applied to a country.

In Webster's New Twentieth Century Dictionary, one definition of the verb 'to develop' is 'to cause to grow gradually in some way'. And 'development' is defined as 'a step or stage in growth, advancement'. From these two definitions it should be possible to attach meanings to the above terms as they will be used in the context of the study.

When applied to a country the word 'development' is best defined as 'a stage in growth or advancement'. Implicit in this definition is the idea of moving by stages from one state to another which in some way is considered an improvement or advance on the former state.

Hence, a more precise definition of development would include the concept of a starting point or state and an end state which is presumed to be more 'advanced'. Thus in applying the term development to a country reference should be made to the continuum along which growth is taking place.

In this study, a country undergoing development is understood to be a country undergoing continuing growth by
stages from one state to another. The poles of this growth continuum can be described by various indices - for example, a social index - growth from one social state (traditional society) to another state (achievement society); an economic index - growth from a state of low production to a state of high production.

A strict parallel with the definition leads to the assumption that the end state is 'advanced'. Thus to complete the parallel in the above statement a value judgement must be made as to the desirability of the end state to which a country can advance.

This makes it necessary in discussing the development of a country to specify the end or advanced state which is desired (or assumed) from the growth.

'Process' is defined as 'a series of connected actions or changes'.

The 'development process' is therefore, 'a series of connected actions or changes, producing by stages, growth toward some desired advanced state or goal'.

According to the strict definition given above every country is engaged in some form of development process, in that it is undergoing a series of changes which is bringing it by stages of growth to some more advanced state.

The components of the development process are partly determined by the goal and partly by the means or actions taken to achieve that goal. Thus the United States of America, which
can be considered a most "highly developed" country, is still undergoing a development process, which might be considered to have an economic goal and economic means - higher national product or increase in the amount of consumer goods available through greater investment and increased productivity. On the other hand, the development process in India, a so-called underdeveloped country, has a social and economic content - its professed end is social and economic betterment, and the means are greater productivity.

We might conclude therefore, that just as change and growth imply a concept of continuity, some form of development process is going on almost constantly in every country of the world.

This development process may be planned or unplanned. The study proposes to make a case for planning the development process in developing countries, on the assumption that planned activity is more responsible, rational, effective and economical and will produce more quickly and successfully the necessary growth toward desired goals.¹

It is relevant at this point to introduce two criteria for testing a development programme, which immediately establish a reason in support of the major hypothesis that the development effort should be planned.

The two concepts of efficiency and consistency can and should be applied to most aspects of a development effort. . . . their application can force a deliberate and specific examination to see if a decision is
appropriate in terms of a stated goal. The goal may be increasing political support, but if the question is deliberately raised as to whether a particular proposal is likely to result in maximum political benefit at minimum cost, the development effort is likely to be more effective than if the question is not specifically considered.²

This approach presupposes certain assumptions about the means and ends of the development process and about the desirability of these ends. It is often stated that the purpose of development is the improvement of man's level of living.³ This is a rather vague concept and must be translated into more concrete terms.

The major goal attached to the development process in most of the countries to be covered by this study is, that a state of high mass consumption of goods and services, widely distributed, is desirable.

The acceptance of this goal carries with it certain basic components in the development process.

Economic - change from a state of low productivity caused by primitive technology to an industrialized state of high levels of production and mass consumption.⁴

Social - change from a traditional society oriented toward ascription, particularism and functional diffuseness to a form of social behaviour oriented toward achievement, universalism, and functional specificity.⁵

Political - change from a state of colonialism and/or decentralized rule to a state of strong centralized government with complete self-determination.
Cultural-psychological - change from traditionally determined patterns of behaviour and a value system geared to limited expectations to attitudes and a pattern of behaviour characterized by rising expectations or the "Protestant Ethic".

The consequences of these changes must also be stated if the full nature of the development process as considered in this study is to be understood.

(a) Physical environment - changes in the physical environment will take place which are related to the changes in economic and social organization. The changes will embrace communication facilities, services, urban areas, housing and other buildings, and other physical facilities.

(b) Social requirements - changes and improvements will become necessary in education - professional, technical and vocational - public health and sanitation, social institutions for organising commerce, labour, and family structure among others.

(c) Spatial requirements - consequent on all the forementioned changes, the development process may produce changes in the patterns of settlement and movement with all that these imply for land uses, spatial arrangements and communications.

**Developing Country**

While in the strict sense of the term every country by virtue of the fact that it is changing must be classed as
developing, in this study the following meaning will be attached to the term.

The term 'developing country' will be taken to include all countries which since the end of World War II have gained full independence or which have been granted sufficient responsibility for their internal affairs to permit effective planning by the Central Governments.

Conscious development starts when the responsible government takes a commitment to develop by stating certain goals and objectives and proposing a definite series of actions to achieve them. In this respect, therefore, a country becomes a 'developing country' when the responsible Government recognises the need for development, specifies the goals desired from development, and indicates the means whereby these goals will be achieved.

In the past the development process operated with a minimum amount of government participation. Especially in the more highly developed Western countries private elements in the society undertook all phases of development, and government's role was merely that of regulator of private activities and the arbiter of competition between individuals. Many factors which operate today in the newly developing countries seem to necessitate a greater degree of government participation in the development process.

The underlying factors which create this need are: the scale of the required development and the scope of the proposed changes; the immediacy of the needs of the developing
countries; and the complexity of the modern economic world.

The scale of development is set by the extent of present deficiencies and the enormous anticipated growth of population, and requires radical social, economic and physical changes. The scope of the proposed changes demands the planning, organization and financing of a vast development effort which can only be undertaken by government.

The disparity between resources and a population with rising expectations creates an immediacy to development needs which requires active government participation, and rational planning to strike the necessary balance and to produce the needed changes at a rate commensurate with social objectives.

The complexity of the modern economic world has increased the role of government everywhere in economic matters. Government's participation is more necessary in newly developing countries where resources are scarce and waste cannot be afforded. Unplanned government action is no more effective than uncontrolled free enterprise, and although planning itself is a costly operation, it is obvious that newly developing countries can hardly afford not to plan.

For these reasons planning for development, in varying degrees of effectiveness, has become one of the regular functions of central government in developing countries.

The degree of planning which is accepted depends on a number of factors - the political and administrative traditions of the country, the structure of its economy, the type of government which emerges, and the character, education and ex-
perience of the leaders of the country and of its people in general.

The fundamental hypothesis of this study is that planning for development must be based on a comprehensive approach, which becomes necessary when the development process is viewed in its totality to include economic, social and physical elements.

The hypothesis will first be argued on a broad theoretical level by examining the current practice of planning for development in developing countries. The case for a comprehensive approach will be made on the basis of this general argument in which it will be shown that current practice fails to be comprehensive largely by over-emphasising the economic aspects and by ignoring the social and, particularly, the physical implications of development. This discussion will form the subject matter of Chapter I, which will conclude with a few tentative comments on the type of planning philosophy that is needed to guide the development process.

Chapters II and III are devoted to developing the case for comprehensive planning in Trinidad and Tobago. First the problems of development are presented and discussed, with major emphasis being placed on the planning implications of the development process.

This is done by pointing out that efforts to build up the economic base of the country entail social and physical implications and that planning of all the elements of the development process must be combined if complete success of the development effort is to be achieved.
In Chapter III the planning process as far as it is presently applied to development in Trinidad and Tobago is described and evaluated. This discussion embraces both the content of the planning process and the organization for planning within Government.

The appraisal of the planning process in Puerto Rico provides an example of the application of comprehensive planning to development. Puerto Rico is similar to Trinidad and Tobago in many ways and the success of the planning organization in that country provides some practical lessons for Trinidad and Tobago.

In Chapter V an organization for planning for development within Central Government in Trinidad and Tobago is proposed and discussed. The nature and content of the planning function as proposed is an elaboration of the ideas first presented in Chapter I, and their application to a practical situation. The organization is designed to fit the conditions in Trinidad and Tobago and to blend as far as possible with the existing structure of the administration.
REFERENCES

1 This statement on the characteristics of planned activity was taken from comments by Ahtik Vitomir and Rexford Tugwell. Vitomir states that

The fundamental characteristic of planned activity . . . consists in the fact that the activity is directed towards a predetermined and more or less immediate objective, and in the fact that the succession of individual actions is governed by the determination to attain this objective undistracted by minor incidental obstacles or by subsidiary aims which are incompatible with the main end in view.

In contrast, in unplanned action the goal is not determined in advance on the basis of a conscious analysis of the complex situation and of future needs. Vitomir concludes that "planned action is consequently considered to be more responsible, rational and economical, and to lead more surely and more quickly to the goals in view". (International Social Science Journal, XII, No. 4, (1960), p. 579. Also Tugwell views effectiveness as "being able to define objectives and achieve them." (The Place of Planning in Society, Puerto Rico Planning Board, Technical Paper No. 7, p. 20).


3 One such statement was made by Ernest Weissman. "The recognised purpose of national development is the improvement of man's level of living". Address delivered at the Conference on Town and Country Development Planning, Trinidad, B. W. I., November, 1956.


CHAPTER I

CURRENT PRACTICE OF PLANNING FOR DEVELOPMENT
IN DEVELOPING COUNTRIES

Nature of Development and Approach to Planning

The Governments of newly independent countries have inherited certain conditions which tend to make their problems of development similar and which have influenced their approach to planning in an almost identical manner.

In the first place these countries emerging from a state of colonialism all have economic and social structures which developed in the shadow of a metropolitan nation. The organization of economic activities is largely oriented to the requirements of an imperial system, and many aspects of the social structure are merely artificial imports from the society of a mother country. Industries and social institutions are modelled on Western patterns and as such are not suited to the needs of the indigenous population.

At the same time there exist in these countries traditional patterns of economic and social life. In the sector where these patterns exist the population is usually stable, homogeneous and not very productive, and the economic system is stagnant and inefficient.

The physical pattern which the Governments inherit also reflects this dual character. A small artificially developed
urban sector contrasts with a vast rural area with little development.

Thus the task facing the Governments of newly independent countries is to re-orient the economy, to develop the unproductive sectors, to re-structure the society, and to organize a more efficient and balanced physical pattern.

A conscious commitment to develop and a passionate desire to 'catch up' with the more highly developed Western countries quickly spring up with the achievement of independence. This 'will to develop' is manifested in a variety of objectives - social justice and equality of opportunity, national security and defense, welfare of the people and a higher standard of living.

At the root of all these objectives can be found one major goal, that is, to increase the production, distribution and consumption of all goods and services. In other words the Governments of newly independent countries consider economic development to be both a major objective in itself, and the means towards the achievement of other objectives.

The result of this point of view is the tendency to regard economic development as the cardinal, if not the sole element in the development process.

This view of the development process seems to have its origin in two sources. One, in the theories of economists who have concerned themselves with the problems of developing countries; and two, in the patterns of development evolved in the more economically advanced Western countries, and actively copied by the developing countries.
The approach of the economists is summed up by Hoselitz in a review of the existing literature on the problem.

Some of the most meritorious contributions to this literature deal with such typical economic problems, as capital formation, the development of an industrial labour force, monetary and fiscal aspects of economic development, the impact of economic growth on living standards and consumption levels, and the problems of balance of payments difficulties, as well as the need for and the difficulties of development planning.

In an attempt to construct models for their development, developing countries look to the experience of the Western countries with advanced economies. It is observed that economic progress followed radical technological changes and extensive industrialization. And that the sustained economic growth and material benefits which these countries enjoy are made possible by continued technological improvement and the application of specific economic tools.

The propagation of these models is perhaps furthered by the expert advisers whom many of the developing countries engage in the early stages of their development effort.

Friedmann in his critique of an early (1949) United Nations report on Haiti, indicates the approach which these experts take in the following quotation from the report.

The central aim to be set for economic development is to raise the general standard of living. To this end, national real income must be increased at a rate exceeding the growth of population; this goal can only be achieved by a determined expansion of physical production, broadening its material basis and mobilizing for the purpose (within the limits set by efficiency considerations) the abundant and now poorly employed manpower.

To say the least, this view reflects a rather naive and
limited understanding of the development process. Kendelberger and Spengler in their reviews of a number of reports of missions by the International Bank for Reconstruction and Development have also been critical of the approach taken by these experts to the problems of developing countries.3

Practical experience in the planning and implementation of development programmes led to a more complete understanding of the nature of the development process. It became clear that in addition to purely economic factors there were many non-economic factors which impinged on the development process and which, moreover, appeared to be essential for its success. Social and cultural conditions as well as the nature and scope of the institutions of a community were recognised as important ingredients in the operation of a development programme.

The recognition of non-economic factors as necessary components in the development process led to a revised concept of the nature of development. This view is outlined in the following statement by Staley.

Economic development is a whole complex of interdependent changes manifested simultaneously in the physical environment (new roads, buildings, machines, implements, chemicals), in the forms of association by which men live and work (growth of cities, changes in government, factory organization, business corporations, banking, readjustments in land tenure, family practices, even religion), and in the skills, habits, thought-patterns of millions of individuals (literacy, technical specialization, respect for scientific methods, ambitions, the idea of progress).4

As far as it goes, this statement provides a well articulated model of the development process along the lines postulated earlier in this study. In recent years this model of the
nature of development has been adopted as the basis for the strategies employed in planning for development.

Three general types of strategies have emerged in developing countries which reflect the original bias toward economic progress as the major element in the development process.

These strategies are:

1. Emphasis on the need to increase capital or savings, and therefore on a strategy that increases savings;
2. emphasis on the importance of particular human skills and attitudes, and therefore a strategy that produces, trains, or encourages such groups as entrepreneurs, investors, decision-makers, technicians;
3. emphasis on political structure or psychological motivation of the society as a whole, and therefore a strategy that influences values, political attitudes, or particular political groups.5

The emphasis is evidently placed either on factors which contribute directly to economic development, or which bear on the non-economic aspects of economic development. On the other hand, the purely social, cultural and physical factors involved in development are seldom regarded as being equally important.

It can now be understood why an approach to planning which is based on the above concept of the nature of the development process displays certain shortcomings. Subsequent sections of this chapter are devoted to the discussion of these shortcomings and some of the undesirable results of this approach.

At this point it is worth noting that the emphasis on economic development is clearly demonstrated in the fact that agencies specifically charged with this function are often created before the planning agencies in developing countries. Furthermore wherever planning organizations have been established
the composition of the staff reflects a similar emphasis on economic planning. The staffs are dominated by economists. Development is rarely viewed as a total process requiring participation by all 'development' specialists.

For example, in Pakistan the Development Board was set up in 1948 to deal with the question of economic development, while the Planning Board was established in 1953. In India the Industrial Finance Corporation was created in 1948 for the purpose of providing credit and capital for industrial development; the Planning Commission was formed in 1950.

A perfect example of the bias in staffing is provided by the following comment on India's Planning Commission: "... the Commission has a brilliant staff of economists who have mostly had experience abroad."8

Current Practice of Planning for Development

Planning for development in developing countries is designed to achieve certain specific goals. Most countries have a multiplicity of goals, which are expressed in vague, sometimes emotional, terms.9

Although variously expressed, the major goal of developing countries is an increase in goods and services available, with progress towards it measured by increase in national income. This is seen as the initial step on the way towards greater 'social and economic progress' and a 'higher standard of living', and therefore assumes the stature of the dominant goal.

However, making the maximum increase in goods and services the primary goal of development limits the scope of the
development process, and is subject to two serious criticisms: 
"(1) national income does not measure changes in the availability of goods and services with sufficient validity and accuracy; and, (2) it is not possible to establish any clear correspondence between changes in the supply of goods and services and human welfare."\(^{10}\)

Looking at it from a different point of view, the following observation has been made by another critic.

Acceleration of development, especially along industrial lines, is proposed at times as the universal nostrum and remedy for all the ills that primitive economies are heir to, quite as though development were completely costless or at least as though no reasonable man could doubt any amount of development at any speed to be worth whatever the costs may be.\(^{11}\)

This criticism warns about two important aspects of development which are often forgotten - rate of development and the associated indirect costs.

Nevertheless these are precisely the shortcomings of which planning for development in developing countries is most guilty. Thus having accepted the goals and having adopted the traditional model, the government of a developing country orients its planning function in such a way that the development plan displays these shortcomings.

Working within this framework it is not surprising to find that planning for development by central government is largely focussed on economic planning at the national level, and geared to achieve maximum rate of growth in the shortest possible time.

The planning agency of most developing countries is
primarily concerned with allocating national resources to encourage maximum growth in the economy as a whole; the formulation of national targets for income, production and employment; the preparation of a budget for public investment; and the development of appropriate monetary, fiscal and exchange policies. The emphasis is placed on maximizing the utilization of existing resources and developing new resources, and encouraging private enterprise where the nature of the economy permits it, in order to expand the industrial sector.

A direct consequence of these policies is the active promotion of industrialization, and planning is focussed on specific programmes to stimulate the growth of industry. Apart from the programmes which embody the above policies, there are certain types of projects that are necessary concomitants of an industrial economy - power projects, harbours, railways and roads, airports, reclamation and irrigation projects, and the expansion of other public services and facilities. Location criteria for these projects are normally based on economic feasibility and the plan usually assumes an optimum locational pattern.

Non-economic factors are sometimes mentioned but only to be considered in relation to the needs of economic development. In keeping with the Western models, these factors are always considered in the context of Western society, and efforts are vigorously directed to achieving an image of western society. For instance in 1951 a group of United Nations experts considered economic motivation to be one of the essential
measures for economic development.

"Social institutions in any (developing) country must permit freedom of opportunity to provide incentives to individual innovators in the society." Another essential is the 'will to develop'. "The leaders of the society must desire progress and be prepared to pay its price, which is the creation of a society from which economic, political and social privileges have been removed."

Another feature of current planning for development in developing countries is that planning is functional rather than comprehensive. Each function is planned separately and programmes are highly specialized. Not enough attention is paid to the interrelationships between the functions and the sectional programmes are not integrated. In these circumstances co-ordination by a planning agency becomes more a problem of budgeting than of planning, and the allocation of financial resources to specialized programmes and projects becomes the major task of the agency. Often, too, the programmes are national in scope and the budgeting is in aggregative terms.

All these activities which form such an essential part of development process in newly developing countries are important and relevant. They must therefore be included. Moreover, within the limits set by the goals this type of planning has been successful.

However the question arises whether this approach to planning is comprehensive enough to achieve fully the goals set for the total development process as outlined previously.
If the planning function in central government is to direct and co-ordinate the series of changes which characterize the development process, it is obvious that it must be an all-inclusive process; that is, it must be comprehensive. The following is a most complete definition of comprehensive planning.

Comprehensive planning is the establishment of overall objectives for an institutional or organizational entity, and the conduct of its affairs so as to maximize the achievement of these goals. It seeks to optimize the overall productive accomplishment and effective existence over time of the organism to which it is applied. It is therefore co-ordinative, inclusive, and projective in its viewpoint. One of the primary purposes of comprehensive planning is the integration of various functional and other partial planning activities. Defined in this way, planning for development is seen as a process which deals with the co-ordination of many factors into a functional programme directed to the achievement of predetermined goals.

The first task of planning in developing countries is to clarify the goals of the country, to get consensus on a consistent set of ends for the development process and to formulate them in concrete terms. Planning must also point out the implications of the changes which the development process entails and identify any secondary objectives which must be achieved.

A critical stage of the planning process is the analytical stage - the survey and analysis of existing conditions and available resources. Obviously realistic goals must be related to the means to achieve these goals; "all socially justifiable requirements must be measured against the natural,
economic, technological, and human potential of a geographic area or country." Two sets of basic factors, the goals and the means, must then be related to one another in time and space.

There is no one unique and best strategy for development, and one of the most important contributions of comprehensive planning is the charting of alternative strategies with their associated costs and benefits carefully and explicitly worked out and stated. This will assist the decision-makers in agreeing on the best course of action for the given conditions and in adjusting the plan with speed and ease whenever changes in the conditions warrant it.

The detailing and articulation of the agreed plan of action is the next stage in the planning process. Some device must be available for ensuring rationality and consistency in programming of the required changes, for measuring the progress of the development process and for assessing its success.

The physical environment is the best single index of the progress and success of a development effort, since development must ultimately result in physical features. Clean, orderly cities, adequate, comfortable housing, an efficient transportation network, well organized public facilities and services, and an attractive countryside all add up to a picture of a country in which a high level of economic prosperity and social satisfaction have been achieved. These major elements of the physical environment are man-made. Hence the population of any country has the power to influence the development of the physical environment.
The implications here are many. Firstly, the major elements of the physical environment can be consciously planned. Secondly, as the end product of the development process, a plan of the physical environment can serve as a guiding and controlling device for the required changes. Thirdly, the plan can be used as a yardstick for measuring the progress of the development programme. Fourth and finally, such a plan can express the desired goals of the Government and people of a country, and provide a picture of the future towards which the country is striving.

The argument here is that, in planning for development, one of the most important phases of the process is the planning and design of the future physical environment, and the programming of physical and related changes. Current practice of planning for development has largely ignored these physical changes and has left them to take place by accident. This approach has failed to recognize that changes in the physical environment and in the pattern of settlement have far-reaching implications for economic development, and that intelligent physical planning can make a vital contribution to the entire development process.

On the other hand, there is a strong tendency on the part of those responsible for physical planning, who operate mainly on the local level rather than on a national level, to place their sole emphasis on the spatial dimension. The physical planner does not take economic policies and decisions into consideration when formulating his plans; nor is he in a posi-
tion to influence such development decisions as might affect the physical environment, since he is not intimately associated with the decision-making process in the central planning organization.

The physical planner's activities are limited to local communities, metropolitan areas, village developments and to 'special projects', such as large-scale housing, rehabilitation and redevelopment of urban areas, and industrial estates.

The responsibilities of the physical planner are to organize the physical environment so as to serve accepted development goals and to accommodate different economic and social activities. The physical planner thus appears on the scene after the basic decisions on development have been taken and his job is merely to determine the most feasible and satisfactory arrangements of land uses and the best pattern of activities to facilitate the economic relationships. Beyond that, he formulates controls to ensure that future physical development proceeds along desired lines.

Physical planning is thus relegated to an almost secondary role, remedial, regulatory and negative in character. The physical planner is given a passive position rather than assuming an active place alongside the other planning specialists.

To sum up, the planning function in the central governments of developing countries has been based on a limited concept of the nature of the development process, and on a too rigid model more suited to already industrialized societies. The result has been specialized planning instead of comprehen-
sive planning - with economic planning and physical planning maintaining an unhealthy distance between them and pursuing widely differing interests.

**Criticism of Current Approaches to Planning for Development**

The focus of this study is to investigate the problem of integrating the physical and economic aspects of the comprehensive planning function. The third element, social planning has not in the past received much attention and contributed anything to the total process. This omission is due to the fact that it has been tacitly assumed that efforts directed at economic development must perforce result in tangible social benefits. As a result social planning has gone by default.

It is obvious that the social aspects of development cannot be ignored. Social changes are both cause and effect in development. Social conditions are important determinants of the development activities. It is necessary therefore to consider social planning as an essential part of the comprehensive planning process.

The contribution of social planning is made in two ways. Much of the planning in developing countries assumes that there are specific common needs and goals in society, and that these can be defined and pursued in terms of coherent social and economic policies. Obviously in this assumption there is danger that policy decisions will be subject to arbitrariness and may display important omissions. It is necessary therefore that the policies and the programmes which emerge from them be constantly
tested and evaluated for compatibility and comprehensiveness.

This is one area in which social planning can make a significant contribution to the planning function, and the other, is in the problem of urbanization and the accompanying transformation of societies. The following statement sums up this aspect of social planning very neatly:

Intelligent social planning is a device for effecting integration, co-ordination, cohesion and order within the urban setting or in the largely urbanized nation. It is social intervention necessitated, on the one hand, by the new problems created by the city, and, on the other, by the rapid deterioration in the urban environment of some of the elements of the pre-urban traditional social heritage.16

Criticisms of the current approach to planning for development have been increasingly urgent in recent years. Many authorities have pointed out the shortcomings in the segmented approach and have advocated the need for a better comprehension of the nature of the development process and more highly integrated planning to deal with it.

In the searching article "Economic and Physical Planning: Co-ordination in Developing Areas", the authors make the following criticism of the purely economic approach in National Plans:

Economic development plans concentrate on capital use. They do not as a rule indicate a plan for land use as such. Decisions as to the use of land are left to private investors, local governments and to central government implementing agencies within the framework of capital allocation which is provided in the economic development plan. Presumably if an appropriate allocation is obtained, the appropriate allocation of management, labour and land will follow automatically.17

Catherine Bauer in her analysis of the problem has concluded from discussions with two well known economists (L. Grebler and M. Millikan) that social problems such as housing and
general living conditions are largely ignored by these scholars, or else the problems are acknowledged but deferred.

They . . . assume that for maximum social-economic progress in a limited time, a backward but ambitious nation should concentrate almost wholly on increased productivity and better cash incomes in the early stages leaving all general concern for housing and other strictly 'social' improvements till later when the means to pay for them can be better spared. 18

A critical comment on this approach was made by The Housing and Planning Branch of the UN Bureau of Social Affairs, in its Bulletin No. 9.

In framing development plans designed to increase the productivity of the worker and consequently the national income of the country concerned, even if full account is taken of the industrial capital required, in many cases no adequate allowance is made for the additional capital required for construction work related to housing and urban development. 19

The fault here is a lack of appreciation of the contribution which items such as housing can make to the national economy, and the fact that these so-called social improvements have a powerful effect on the course of the development process and are conditioning influences on its success.

A recent conference on Housing held in Israel examined this problem of housing in relation to the National economy and economic growth. The consensus in Israel which has had many years experience in the implementation of a National Housing Policy, is that it should be "an inseparable part of overall physical and economic programming on a National scale". 20

Concern over the specialized approach to planning for development, which has widened the professional distance between
the different specialists concerned, is expressed by Ernest Weissmann.

Formulation of broad development concepts and varying degree of economic programming have been recognized functions of government of all countries. In a growing number of cases health, education, housing and general welfare have also become important components of national policy and planning. However, the change in the physical environment which such plans impose have rarely been considered by development and planning boards to be equally significant.21

This gulf between economic planning at the national level, which is concerned with overall development policies directed toward industrialization, and physical planning at the local level which tries to cope with problems of the physical environment after the basic development trends and decisions have been established, is the result of "the frequent failure to view development as essentially a continuous process, from the cradle in economic and resource policy to the grave in urban slums".22

The most critical consequences of this lack of the integrated approach are the spatial effects of development.

(1) the lack of any analysis of the spatial implications of economic development;

(2) the over-emphasis on the national scale, with the consequent lack of attention to the regional and local levels;

(3) the lack of a comprehensive policy and programme for the overall development of the physical environment.
Spatial Implications of Economic Development

A programme of planned development in any country does not start with a completely clean slate. Past development, whether planned or unplanned, has taken place in response to a variety of influences and has had physical results and produced a pattern of settlement. In the developing countries (as well as in many of the more highly developed countries), past development, which was either completely unplanned or else planned with other than national welfare objectives, has resulted in distorted physical patterns.

The typical picture of an underdeveloped country is one which shows two sharply differentiated sectors: a peasant-agriculture-and-handicrafts sector using simple labour-intensive techniques, where man-hour productivity is extremely low, and where from one-half to four-fifths of the population earn their incomes; and a plantation-mining-and-manufacturing sector, using advanced techniques, where man-hour productivity is high but where only a small proportion of the population is employed. The advanced sector is often export-oriented and is quite often managed by foreigners. Both sectors are distinct geographically as well as technologically and economically.

A further distinction can be made; the high productivity sector is usually the urbanized area, while the low productivity sector is the rural area of the country. All the developing countries today fit the above model. One or two large cities represent the advanced sector in contrast to the vast rural hinterlands - Bombay, Delhi, Calcutta and India; San Juan and Puerto Rico; Haifa, Tel-Aviv, and Israel; these examples can be extended to include almost every developing country.

What of the future pattern under the influence of rapid
economic development?

(1) Experience has shown that rapid development tends to solidify and perpetuate this existing pattern of urban-rural imbalance. The rural-urban migration which accompanies economic development and the process of industrialization is well known, as are the immediate causes of it. The phenomenon has been well documented. So too have been the more undesirable consequences.

However, it appears that professionals engaged in planning for development do not often consider these spatial implications of the policies which they recommend.

Development encourages activities which have to be located in space. These activities are related to each other and must be interconnected by a system of communications in order to function with maximum efficiency. Obviously then where activities go is an important factor in facilitating interaction, and the location of development activities should therefore be planned with an objective of the reduction of demand for movement.

(2) There is a further reason for advocating consideration of the spatial implications of development. Quite apart from the social costs of over-concentration of activities in a few small areas, there is reason to believe that the scale and pattern of physical development seriously influence the costs and benefits of economic development. Urban concentration is not an unmixed blessing.

On the plus side it is argued that the city minimizes
the 'friction of space' which is one of the greatest obstacles to human development, as the concentration of productive activities in a small space facilitates inter-dependence and the provision of services.

There is reason to believe that these advantages do not continue to increase with size, and that the cost of providing necessary and desirable services may outweigh the benefits derived from concentration.

In fact rapid urbanization which has tended to move ahead of economic development in developing countries is one of the major problems. This rapid urbanization has serious implications for their economies.

It means that as the process of economic development catches on, the demand for the provision of urban economic and social infrastructure investment grows much more rapidly than do several other sectors. This means that demands on less productive projects (in the immediate sense) will be made on the scarce capital resources of these economies in the early stages of their development.24

Even in India where there has been some recognition of some of the more unfavourable consequences of rapid development, the results to date have been discouraging.

Even in its early stage of incomplete industrialization, India has not escaped some of the evils of the haphazard growth of industry, of slums in the more and more overcrowded cities, the economic depression of some groups and classes of the society who lost their integrated part in the old village communities.25

One observer of the Indian scene has pointed up the conflict between the pros and cons of metropolitan concentration.

We are led to a conclusion that there is one strong built-in element of growth in the Indian economy which will tend to accelerate the concentrations of populations in the larger cities, and to create new cities of
metropolitan size. At the same time we see that this built-in element is a powerful instrument of economic development in that it is a source of new capital, new skills, and higher incomes.26

Some authorities, viewing these consequences advocate an active policy of decentralization as the only way to stem the tide of migration and mitigate some of the ill-effects of development.

It is possible that some underdeveloped areas would progress further, in the long run, if they invested and reinvested their meagre resources in agriculture and rural industry. Not only would they help accumulate more capital for the future, but would lessen the tendency for urban development to get out of step with the rest of the economy.27

It is admitted that great cities are both necessary and desirable, and that certain types of economic enterprise demand metropolitan locations or depend on the services and linkages provided in a big city. However, it is argued that the locational requirements of a wide range of enterprises permit a much greater flexibility in location. And that some degree of decentralization is feasible.28

The experience in Japan provides some support for the argument of decentralization. In a report by the ECAFE Secretariat some of the techniques employed there are outlined and evaluated.

If urban growth, described as the best general test of industrialization, is studied in the Asian countries it is only in Japan that the economic character based upon industrial specialization and exchange is observed to be relatively more prominent. The reason for this appears to be that some of the basic foundations for industrial development have not been confined to large cities but have also been effectively built up on a limited scale in a number of towns of moderate size. However, the cost of industrialization has been cheapened
by avoiding excessive urbanization with its heavy overhead provision of urban housing, transport, water supply and other services, by developing industries which relatively require less capital and which do not heavily draw on public utility services...

There are obviously two schools of thought, one which favours greater metropolitan concentrations in the interest of increased economic efficiency and higher productivity; the other, which argues that some degree of decentralization is feasible, and may bring both social and economic advantages. Planning professionals seem to be similarly divided: those concerned with the economic aspects of development are aligned on one side of the argument, while the social and physical planners lean toward the other.

Uncritical adherence to the Western model leads to the conclusion that the concentration of productive activities in large metropolitan areas is necessary, and that the resultant consequences are unavoidable. The question for the developing countries is whether an unduly large proportion of their limited resources can be diverted to unproductive investments in urban areas and on remedial measures for the physical environment, at the expense of the surrounding countryside and the more directly productive enterprises.

For example it is estimated that 50 to 70 per cent of all capital in several developing countries goes into economic and social overhead, with urban areas absorbing about two-thirds of the total.

Rodwin points out that even though the losses due to the inefficient allocation of capital are hard to estimate they are
quite real. "They involve not so much the increasing costs for overhead, transportation, and congestion in the one or two expanding cities, as the costs resulting from the failure to exploit resources and other investment opportunities in the lagging regions."31

It is obvious that the question of the spatial implications of economic development is an area of the development process which is not well understood and for which there are no fixed rules. The task of integrated planning in this sphere is quite clear. If the development process is to be efficient and economical, in achieving the desired goals, consideration must be given to the spatial implications of development. Some analysis of the associated costs and benefits of alternative locational patterns for productive and industrial enterprises must be made in advance of the actual development.

Segmented planning has failed on several counts. The rural-urban imbalance has not been corrected, but rather it has been intensified; all the costs and benefits of overconcentration have not been analyzed; and, there has been little investigation of the alternative patterns of urbanization and settlement to accompany rapid industrialization.

That planning must be based on knowledge is axiomatic. It is evident from the literature on the problem of the spatial implications and requirements of development that there are widely differing views and no one incontestable theory. This makes it essential for an integrated planning organization in any developing country to undertake research into these problems
conduct a thorough analysis and work out acceptable guiding principles for that country. It is necessary for the planning organization to determine the specific role of the large urban areas in the country, and their relationship with the hinterlands; to work out principles and standards of location for development activities; and to indicate what scale and pattern of development are consistent with a proper urban-rural balance within the limits of desired goals.

National versus Regional and Local Levels

Arising largely out of the way the function has evolved in developing countries, planning for development is characterized by an emphasis on actions at the national level, ignoring the regional and local spheres of development.

This lack of 'spatial integration' is reflected in the national plans of these countries. The programmes proposed in the plans are national programmes. Even in cases where for expediency or for administrative convenience, programmes are implemented on a lower level, for example, state or provincial, there is no indication that allocations for programmes have been based on a rational analysis or that competing claims have been resolved on the basis of a good system of priorities.

Moreover, it is now generally accepted that arbitrarily defined administrative areas hardly ever conform to regions delineated for planning or development purposes.32

Often national policies are applied to the whole country ignoring the fact that regional disparities exist and differing
regional requirements may create a need for a variety of pro-
grammes. In particular the characteristics of a dual economy
are reflected in 'leading' and 'lagging' sectors of a country.
And national programmes uniformly applied are not likely to
overcome the tendency for productivity of these sectors to draw
further and further apart. Interspatial relationships assume
prime importance in this problem, and thus, national policy
should always be tested against specific regional requirements.

Here again is the need for an integrated planning
approach based on a complete knowledge and analysis of regional
factors in the development process. It requires that planning
at the central government level develop a national policy for
integrating programmes in accordance with sectoral requirements.

Most planning until now has stressed integration
according to functional sectors of the economy, but
rapid economic growth for the whole country will come
only if the planners superimpose upon this system of
functional integration a correlative system of regional
integration as well.33

Some experts see this as basic to the whole planning
process. "Intersectoral and interregional relations, instead
of being a frill in underdeveloped countries to be superimposed
on a more or less complete system, should be at the very core of
the analytical framework."34

The argument here is for a rational and consistent sys-
tem of priorities for making decisions on an intersectoral
basis. To achieve this there must be surveys and analysis on a
regional basis, and standards for resolving regional conflicts
and competition for resources. These activities can only be
carried out within a planning organization at the level of
central government which has recognized the need for and has evolved a policy of regional development.

The planning agency has to work out devices for adjusting national policies to regional and local needs.

Planning for Overall Development of the Physical Environment

The benefits to be derived from a plan for the physical environment have already been discussed. The importance of this plan is further recognized when the relationship between economic development and urbanization, and the social transformation from rural-agricultural to urban-industrial conditions which results from development are considered.

These are clearly two aspects of the same problem and should therefore be formed into one policy. This policy on physical development which will express a pattern of settlement, a distribution of major land-uses, and a plan of urbanization will evidently be based on desired goals and objectives and take into consideration all other elements of the development process.

Formulating this policy into a plan for the overall development of the physical environment requires the reconciliation of the many factors which impinge on the development process. To be realistic the plan of physical development must be consistent with the overall goals and policies of the development programme and must be feasible in terms of the available and potential resources of the country.

All essential requirements must be worked out and coordinated within the framework of the physical plan and the
state of development desired or anticipated at every stage and in every area of the country can be spelled out as a guide to development and a check on activities. The direction, pace and phasing of such a plan will necessarily depend on the essential factors affecting development - the available resources, the physical conditions, economic potential, the social acceptance of proposed changes and the political considerations.

The very process of preparing a plan for the overall physical environment, brings into focus all the elements in the comprehensive planning approach to development. The detail and precision demanded in the reduction of a broad concept to concrete physical terms, and in representing them on paper, will force the planning agency to formulate precise and realistic objectives for the entire development programme.

Even at this stage of the planning process, criteria of consistency and rationality have to be applied to the development plan. The analysis of development activities and their coordination in space and time, by the very nature of the process, must help to remove inconsistencies, resolve conflicts, and cut out unnecessary overlapping. The analysis of conditions and resources (human, physical and financial), will suggest a rate of development consistent with the available resources.

Programming of both public and private actions can be checked against the physical plan to establish conformity with the aims of the overall development effort. By providing a sense of direction, the plan should facilitate individual and corporate decision-making and help to knit the policies and
programmes of government into a logical and consistent whole.
The regulation of private activities, which forms an important part of government's participation in a development effort, will become a much simpler and less arbitrary operation, and will not be exposed to capriciousness which can have a disastrous effect on private participation.

It follows that budgeting of resources for individual programmes can be conducted on more logical lines, since allocations will be made on the basis of a system of priorities, compatible with the sequence of inter-connected changes demanded by the plan. The plan of physical development will also provide the Legislative body charged with directing and implementing the development effort, a means of determining and testing suitable legislative devices and controls which are essential tools in any development programme.

In advocating a plan of overall physical development it is not suggested that this will be accepted as a rigid formula for development. To say that planning must be flexible is to be trite; but this in no way detracts from the value of the maxim. The plan is merely a guide for the development process, a picture of what is desired and feasible. It must allow for alteration and adjustment to changing conditions and influences. The mere completion of successive stages of the development programme, will require changes in the long-range objectives, and suitable devices must therefore exist for accommodating these changes.
A Framework for Planning for Development

It remains now to consider what sort of planning philosophy is needed at central government level in the developing countries to influence and direct planning for development.

The more elaborate articulation of development as the many-sided and multi-valued process outlined earlier, almost automatically leads to the conclusion that, ideally, planning for development must be comprehensive.

Not only must it be so from a functional point of view, by integrating within the total process physical, social and economic planning, but the planning function must also be spatially all-inclusive, covering national, regional and local levels of activity.

This concept underlies the following comment by Meier:

It is no longer possible to divide responsibility between town and country planning on the one hand, and economic and social planning on the regional and national scale on the other. The very large-scale urbanization that must be created in most cases, simultaneously with a continuing demand for raising the productivity of both capital and labour, requires that the plans be all of one framework.35

As currently practised, planning has been developed into a sophisticated and useful tool of government in developing countries. It is employed in varying degrees by all developing countries. Unfortunately, the emphasis has been placed on the economic aspect of development and on related non-economic aspects, all on the national level. This type of planning may achieve maximum growth in the shortest possible time, but there are indirect effects which may increase the costs of development
and produce an unfavourable balance in the long-run.

Among the indirect costs which must be included in the long-run accounting on development, are those costs resulting from the speed and scale of development, the interspatial imbalance which is often intensified by rapid development, and those created by the impact of economic growth on the physical environment.

Co-ordination of specialized programmes is not founded on a rational system of priorities, and budgetary considerations are the major criteria for 'balance' in the programme of development. The important criteria of rationality, efficiency and consistency, have not been systematically applied in the framing of development programmes.

Commenting on the lack of specific criteria for co-ordinating and testing development programmes, Papenek concludes that "the waste of resources has been large in many countries because parts of the development effort were carried out on a different schedule or on different assumptions from other parts." It is hardly necessary to emphasize that developing countries cannot afford to waste any of their resources.

Furthermore Papenek has gained the impression from current programmes "that most decisions on the composition of development programmes are not based on, or even influenced by, specific general criteria."

All the foregoing requirements can be served if an overall physical development plan is adopted as the major guide for
initiating different aspects of the development programme and as an instrument for testing specialized programmes for conformity with the overall concept.

The inclusion of the physical component with economic planning at the level of central government, will provide a measure of realism and precision to the process which is now lacking. The contribution of social planning will be made in the assessment of the possible impact of programmes on the society and in the evaluation of the effects of policies and programmes on the people of the community for whom they are designed. Social planning is also a convenient device for identifying emergent social trends and needs and evolving principles and standards on which adequate programmes can be based.

This is not to suggest that social planning will replace the normal political process, but rather that it will enhance that process, by testing and evaluating the implications of political decisions. The policies of a particular administration provide the general direction for development, but there is need for a body responsible for interpreting these policies, for indicating their effects and for presenting reasonable alternative strategies for implementing them. Modern society is so complex and the nature and scope of Government's social responsibility have become so extensive that decision-makers must be helped by competent and experienced experts in this field, if maximum effectiveness and success are to be achieved from social policy.

Two other aspects of planning for development remain to be resolved: interspatial balance and control machinery. Both
needs can be satisfied by the application of a regional planning framework.

A regional policy for development will require the planning organization to analyse needs in terms of the requirements of the different regions and propose appropriate strategies to deal with each region.

The disproportions which currently plague development programmes can be more easily resolved by the application of regional planning techniques to determine whether overall balance is maintained and whether complementary requirements in development programmes are met in particular. This might entail wide diversity in scope and content of programmes to suit peculiar needs.

In most developing countries 'balanced growth' that is, the development of the whole country at more or less the same rate, is considered desirable for humanitarian as well as political reasons. Regional development policies which allow for a variety of approaches in accordance with the disparities in regional conditions, is more likely to achieve this objective of equitable distribution of the benefits of development, than national policies supplemented merely by decisions based on political expediency of group pressures.

Regional planning is a useful instrument for interpreting national policies in terms of specific local needs. Decisions can then be made which cater to national interests as well as local aspirations. Rural-urban migration can be better understood when viewed in its regional context. Then assuming
that agreement is reached on a desired pattern of settlement, this can be encouraged by a rational policy which recognises urban concentrations not as an isolated phenomenon, but as one which has its roots in the rural hinterlands.

In the economic sense, such a policy accepting the value of leading sectors as growing points for the country's economy, might consciously use these to accelerate development in the lagging sectors, by facilitating interaction between the sectors. This objective could form the basis for planning a rational programme of industrial location and a transportation system.

Regular conscious control of the development process is needed to maintain the continuity and steady pace so essential to the success of the programme. Conceivably the planning process in any country may reach a stage of development at which a high degree of precision and thoroughness in the formulation of development programmes is achieved, but inevitably, random influences will affect the programmes when put into practice. This is especially relevant in developing countries where there may not be sufficient trained personnel in all the associated fields to implement and control the programme.

Under such circumstances, the central planning organization must develop a universal mechanism for controlling the programme. It is more feasible to provide detailed direction at an intermediate level, and to exercise control over specific aspects of the process at this level, than at the national level where programmes have to be global.

These controls can be conveniently and effectively built
into a regional planning framework. Within a regional planning framework, the planning agency can more readily accommodate changing conditions without upsetting the entire programme, especially when these conditions affect only one part of the country. Compensating adjustments can be made in related programmes whenever there is need for a change in any one programme. Similarly, offsetting adjustments can be carried out in other regions when necessary.

There is a growing body of support for the application of regional planning techniques in planning for development in developing countries. Regional planning is seen as a device for refining the planning function in central government to make it more rational and efficient, and better geared to the demands of the comprehensive development process.

Planning for development as currently practised tends to over-emphasise the ends; the side effects which may well be powerful determinants on the ends, are not usually recognized as equally important, and when they are acknowledged they are not adequately analyzed. Integrated planning within a regional framework can ensure that secondary objectives are identified and analyzed, as well as the wide and more indirect ramifications of the primary ends, and, above all, it will ensure that the means are appropriate, efficient and economical while still achieving the desired goals.

One of the best examples of the comprehensive planning function in operation, is found in the Commonwealth of Puerto Rico. Here the Planning Board, a central agency which is part
of the office of the Governor (the Chief Executive), is charged with the responsibility for all aspects of the planning function as applied to development. Most of the basic requirements of comprehensive planning are met within the extensive organization of the Planning Board, and a large and varied number of planning activities are carried on.

The effectiveness of the planning function in Puerto Rico is evidenced by the success achieved with the development effort. It is not suggested that comprehensive planning was solely responsible for this success. But it is acknowledged that planning has contributed in large measure to that success.

For this reason a detailed examination of the major factors surrounding the operation of the development in Puerto Rico, and an appraisal of the planning process and the organization for planning there, will be undertaken in Chapter IV. This discussion will indicate how the comprehensive planning function can be effectively applied in a practical context, and should provide some lessons which can be applied in the case study of Trinidad and Tobago.
REFERENCES


6Pakistan, Planning Board, First Five Year Plan, 1955-60.


9In Pakistan's First Five-Year Plan, the Government's social and economic objectives are outlined:

To develop the resources of the country as rapidly as possible so as to promote the welfare of the people, provide adequate living standards, and social services, secure social justice and equality of opportunity and aim at the widest and most equitable distribution of income and property. Planning Board, First Five-Year Plan, 1955-60, Introduction ( ).

In India's case it is stated that "India has set social justice as both the means and the goal of its development and entire planning effort." Planning Commission, The New India: Progress through Democracy, (New York: Macmillan, 1958), p. 34.

This objective is behind the concept of a "socialist pattern of society." The accent of the socialist pattern is on the attainment of positive goals; the raising of living standards; the enlargement of opportunities for all, the promotion of enterprise among the disadvantaged classes and the creation of a sense of partnership among all sections of the community. These positive goals provide the criteria for basic decisions. Planning Commission, Second Five Year Plan, 1956-61. p. 24.


14 Ibid.


32 For example, in India both planning and implementation are attempted on a State basis. "On November 1, 1956, the previous 28 States were reorganized into 14 States and 6 centrally administered Territories, largely on linguistic lines, and with the intent of making each a more viable administrative unit." (Stefan H. Robock, "Regional and National Economic Development in India," *Regional Science Association, Papers and Proceedings*, VI, (1960), p. 67).
37 Ibid., p. 340.
CHAPTER II

THE DEVELOPMENT PROCESS IN TRINIDAD AND TOBAGO

In this chapter the economic, social and physical aspects of the development process in Trinidad and Tobago are discussed. The purely economic factors are de-emphasised in favour of the social and physical elements of development and the specific implications of development which have special bearing on the approach and content of the planning process.

A brief geographical sketch is given as a background to the discussion of the more relevant components of the development process. The barriers to development and the future potentialities are examined in relation to the needs and desires of the country, and the consequent demands on the planning function in framing a development programme to meet these goals and objectives.

Statistical data are drawn, primarily from two official publications of the Government of Trinidad and Tobago. References are given to all other sources of data.

Geographical Background

The Island of Trinidad is situated about 10 degrees North of the Equator, between 61 and 62 degrees West Longitude in the southern part of the Caribbean Sea. It forms the southern tip of the chain of islands known as the West Indies.
It is separated by seven miles from the Venezuelan Coast on the South American Continent and has the same geological structure. (See Figure 1.)

The Island of Tobago is situated about 11 degrees North of the Equator and 60 degrees West Longitude. It lies approximately 20 miles north-east of Trinidad.

Trinidad, the second largest of the islands of the West Indies Federation, is roughly rectangular in shape, 50 miles long and 30 miles wide, with an area of 1863 square miles. The island is mostly flat, with its highest peaks in the North; Aripo, the highest, is 3085 feet. Tobago is about 32 miles long and 11 miles broad with an area of 116 square miles, making a total with Trinidad of 1980 square miles. The topography of Tobago is broken with a central chain of peaks, reaching a height of 1800 feet.

Climatically Trinidad and Tobago is tropical, but the heat is tempered by the North-east trade winds and the influence of the sea. Mean temperatures are 89 degrees Fahrenheit in the day and 72 degrees at night, with an annual mean of 80 degrees Fahrenheit, an absolute range of 67 to 97 degrees. Rainfall averages 97 inches in the East Belt and 70 inches in the West Belt of Trinidad, while in Tobago the average is 76 inches. Considerable monthly variations are recorded from a low of .9 inch at the height of the dry season in March to a high of 16 inches in the East Belt in the month of June during the wet season.
CARIBBEAN AREA
SHOWING
TERRITORIES OF WEST INDIES FEDERATION

SOURCE: CHRISTIAN SCIENCE MONITOR
BOSTON, NOVEMBER 22, 1960.
The total area of Trinidad and Tobago combined is 1980 square miles. With an estimated total population of 834,600\(^2\) the gross density is 420 persons per square mile. The density of the island of Trinidad is 430 and of Tobago, 300 persons per square mile.

These figures can be compared with Jamaica, the largest territory in the Federation, where the density is 374\(^3\), and Barbados with the highest density of 1399 persons per square mile.\(^4\) Puerto Rico, which is just short of twice the size of Trinidad, has a density of 664 persons per square mile.

The crude birth rate in Trinidad and Tobago in 1958 was 37.6 per 1000. With a death rate of 9.2 per 1000, the annual rate of natural increase was 2.6 per cent, which is sufficient to double the population in 25 years. Migration now plays a much less important part in the population growth of Trinidad and Tobago than formerly, when 143,900 persons were introduced into the territory in the period 1845-1917 alone. By contrast, migration yielded an increase of only 1300 between 1955 and 1957, and 3700 in 1958, which is just 14 per cent of the increase for that year. Whereas the early migration originated in India and Africa and was planned to provide a labour force, the recent movements were confined to the territories of the West Indies Federation.

Overall growth in population is shown in Table 1. At the first census in 1844 Trinidad and Tobago had a population of 73,000, by 1881 it had jumped to 171,000; in 1911 it was 334,000
and by 1946 it had reached 558,000. During the period 1861 to 1911 the annual rate of growth exceeded 2 per cent, and in the decade 1871-81 it was high as 3.1 per cent.

TABLE I

<table>
<thead>
<tr>
<th>Census date</th>
<th>1844</th>
<th>1851</th>
<th>1861</th>
<th>1871</th>
<th>1881</th>
<th>1891</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total persons</td>
<td>73,023</td>
<td>82,978</td>
<td>99,848</td>
<td>126,692</td>
<td>171,179</td>
<td>218,381</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Census date</th>
<th>1901</th>
<th>1911</th>
<th>1921</th>
<th>1931</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total persons</td>
<td>273,899</td>
<td>333,552</td>
<td>365,913</td>
<td>412,783</td>
<td>557,970</td>
</tr>
</tbody>
</table>

Source: Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest, 1958, Table 9 (adapted).

The tenfold increase witnessed between 1844 and 1957 far surpasses any in the Caribbean, and is probably unequalled in the Western Hemisphere.5

The growth in the labour force has been no less spectacular. From a figure of 137,000 in 1891 it rose to 213,000 in 1946 and to 289,000 in 1958. The increase in the first period was equivalent to 56 per cent, while over the whole period of 67 years the labour force more than doubled. This growth is considerably in excess of that experienced in other parts of the Federation, the next largest being in Jamaica with an increase of 30 per cent between 1891 and 1946.

Of particular interest is the movement in the agricul-
tural labour force. Under the impact of the immigration of labour for the sugar industry, this component reached a maximum of 97,000 in 1911, a number two and one-half times that of 1861. Since that date the labour force in agriculture has declined absolutely and percentage-wise. In 1946 it was 58,800 and the most recent figure available, 1957, it was 63,200. The percentage decline was from 51 in 1921 to 27 in 1946 to 23 per cent of the total labour force in 1957.

Growth in total population and in labour force have a significance for the development of Trinidad and Tobago, since these two factors are the starting points of any plan for development. Every plan for future development must be related to the projected numbers in the population and the size and structure of the future labour force.

Two projections of the population of Trinidad and Tobago have been made based on slightly different assumptions. The first assumes declining mortality, constant fertility at 1955 level and no migration. The second takes the same mortality assumptions, assumes declining fertility and considers the effects of small annual increments from neighbouring territories.

The assumption of declining mortality is safe. Despite the effects of growing urbanization, better education and enhanced social mobility which have a tendency to induce downward trends in fertility, there are built-in features of the population of Trinidad and Tobago which make for high growth characteristics (over 80 per cent of the population is under 45 years and 30 per cent is between 0 and 9 years). An assumption
of continued high fertility is therefore quite reasonable.

The assumption of increments due to migration is of special importance. The numbers have been increasing steadily over the last few years, and there is every reason to assume that the trend will continue or even increase under the impact of Federation and free movement of persons. Being the home of the capital of the Federation, Trinidad must expect this. It is estimated that between 1956 and 1971, there will be an increase of 23,000 from this source. Of these 21,000 will be of working age.

According to the two projections the population at 1971 (Table 2) will be 1.15 million and 1.14 million - not significantly different. However it is noted that preliminary estimates for the 1960 census gave a figure of 834,600, compared with the estimates of 856,900 and 861,500 in 1960 by the two projections respectively.

The component parts of the population at 1971 are of special interest. Using the first projection as the basis for our discussion, the most rapidly growing section of the population is the group of school age (5-15 years) which forms a total of 191,000 in 1971 increasing by 59 per cent in 15 years. Also appreciable is the increase in the population of working and child-bearing age from 403,000 in 1956 to 614,000 in 1971, an increase of 52 per cent. If the 21,000 immigrants of working age are added, this increase rises to 58 per cent. The actual number in the labour force by 1971 will be 427,000 at the same rates of participation as exist. And the average annual increase
is estimated to be 9600 between 1961 and 1965, and 11,300 persons between 1966 and 1970.\(^7\)

**TABLE 2**

**POPULATION PROJECTIONS FROM 1955**

| Age (Years) | First Projection\(^a\) |  
|-------------|-------------------------|---
|             | Total Persons | 1955 | 1960 | 1965 | 1970 |
| 0 - 4       | 122,400        | 142,900 | 162,900 | 193,700 |
| 5 - 14      | 190,100        | 225,300 | 261,500 | 302,100 |
| 15 - 44     | 304,100        | 343,700 | 399,100 | 468,200 |
| 45 - 64     | 98,600         | 116,000 | 132,700 | 145,900 |
| 65          | 27,100         | 29,000  | 33,600  | 40,500  |
|             | **742,300**    | **856,900** | **989,800** | **1,150,400** |

| Age (Years) | Second Projection\(^b\) |  
|-------------|--------------------------|---
|             | Total Persons | 1960 | 1965 | 1970 |
| 0 - 4       | 140,600         | 154,400 | 175,000 |
| 5 - 14      | 225,300         | 259,300 | 291,500 |
| 15 - 44     | 349,400         | 410,100 | 484,000 |
| 45 - 64     | 117,200         | 135,700 | 151,300 |
| 65          | 29,000          | 33,800  | 40,900  |
|             | **861,500**     | **993,300** | **1,142,700** |

Source: Trinidad and Tobago, Office of the Premier and Ministry of Finance, *Economic Survey of Trinidad and Tobago, 1953-58*, Table 14 (a) and 14 (b) (adapted).

\(^a\)Assumptions: Constant fertility, declining mortality, no migration.

\(^b\)Assumptions: Declining fertility (15\% between 1956 and 1971), declining mortality, migration at average of 2300 per annum.
Unemployment and concealed underemployment is high in Trinidad and Tobago, and it is certain that the gross figures do not reveal the complete picture of the employment structure.

The figures speak for themselves in indicating the order of magnitude of the needs which the growth in population and labour force will create. Schools of all grades, health services, housing and community facilities, and jobs, in addition to the entire range of necessary public utilities, roads, water, electricity, etc. must all be provided at a very rapid rate. The size of the development effort and the programmes required in themselves present problems for the agencies concerned and for the planning organization which has the responsibility of formulating the programmes, deciding on priorities, and reconciling the competing claims on resources - financial, physical and human.

Regional Distribution of Population and Economic Activities

The foregoing discussion has been conducted entirely in gross terms. The projections and estimates relate to Trinidad and Tobago as a whole. But a complete appreciation of development needs requires a much closer look at the situation in particular regions and local areas.

It has already been pointed out that Tobago, being geographically distinct and having a character and form of its own, can be treated conveniently as a region within the overall territorial framework. Naturally Tobago stands in a satellite relationship to Trinidad on which it depends for servicing,
economic support, and connection with the outside world. However, blessed as it is with natural scenic beauty and unspoilt tourist attractions, the island has a great potential for developing into a tourist resort area of a very special type. Planning for development should be predicated on a policy which gives due weight to these natural advantages, while at the same time promoting a reasonable diversification of the economic base to develop and maintain a viable regional unit. Planning for development of Tobago should present no serious problems and may well serve as an object lesson in planning for other regions.

No similar regional treatment has been accorded to Trinidad. Yet there is a clear case for it, since the physical pattern which has developed displays the distortion and imbalance which are so familiar in developing countries. Moreover, distinct regions can be delineated on the basis of natural and man-made features.

The full meaning behind the figures quoted in Table 1 is revealed when the population concentrations are looked at regionally (Table 3 and Figure 2). The urban areas of Port of Spain and Arima are geographically part of the County of St. George, and San Fernando is part of County Victoria. The urban centres have acted as magnets attracting large concentrations of people to the detriment of the rural regions. The growth of St. George is worth noting specially; the 100 per cent increase between 1946 and 1960 is virtually all suburban growth, having occurred outside of Port of Spain and Arima. As shown in Figure 3 Port of Spain and Arima stand at either end of the spine of a large
built-up region stretching about 16 miles in length with a width of less than three miles. The built-up region extends in a Westerly direction for about seven miles into the Northwestern peninsula. This region, which will be called the Port of Spain Metropolitan Region, contains 45 per cent of the population of Trinidad in a region which is about 20 per cent of the total area of the island.

### TABLE 3

**POPULATION, AREA, DENSITY IN TRINIDAD AND TOBAGO**

<table>
<thead>
<tr>
<th>Administrative Area</th>
<th>Population 1960a (Total Persons)</th>
<th>Area (Square Miles)</th>
<th>Density (Persons/Square Mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Port of Spain</td>
<td>94,600</td>
<td>3.7</td>
<td>25,500</td>
</tr>
<tr>
<td>Borough of Arima</td>
<td>11,550</td>
<td>0.9</td>
<td>12,800</td>
</tr>
<tr>
<td>Borough of San Fernando</td>
<td>40,050</td>
<td>2.5</td>
<td>16,200</td>
</tr>
<tr>
<td>Counties:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Georgec</td>
<td>263,100</td>
<td>354.7</td>
<td>765</td>
</tr>
<tr>
<td>St. Andrew/St. David</td>
<td>38,800</td>
<td>361.7</td>
<td>107</td>
</tr>
<tr>
<td>Caroni</td>
<td>89,500</td>
<td>214.0</td>
<td>420</td>
</tr>
<tr>
<td>Nariva/Mayaro</td>
<td>22,900</td>
<td>352.0</td>
<td>65</td>
</tr>
<tr>
<td>St. Patrick</td>
<td>107,950</td>
<td>260.8</td>
<td>410</td>
</tr>
<tr>
<td>Victoria</td>
<td>131,450</td>
<td>313.5</td>
<td>420</td>
</tr>
<tr>
<td>Tobago</td>
<td>34,650</td>
<td>116.2</td>
<td>300</td>
</tr>
<tr>
<td><strong>Trinidad and Tobago</strong></td>
<td><strong>834,600</strong></td>
<td><strong>1980.0</strong></td>
<td><strong>421</strong></td>
</tr>
</tbody>
</table>

Source: Central Statistical Office.

aPreliminary figures 1960 Census.

bAnnual Statistical Digest 1958, Table 1.

cExcludes Port of Spain and Arima.

dExcludes San Fernando.
TRINIDAD AND TOBAGO
SHOWING
ADMINISTRATIVE AREAS
AND
POPULATION 1960
The reasons for this concentration are not far to seek. Port of Spain, the capital city of Trinidad and Tobago, is the seat of the Central Government and the temporary home of the Federal Government; it is the centre for commerce and a variety of industrial activities, the focus for transportation and with an excellent natural harbour is the major break-point and trans-shipment centre; it is the established centre for cultural, educational, sporting and entertainment activities. Thus, it exhibits all the characteristics of a magnet for internal migration, the main source of urban growth.

Transportation facilities, first rail and then road, have triggered the well-known dispersion from a major urban centre of residential, commercial and to a lesser extent industrial activities. This dispersion from Port of Spain has resulted in the present linear pattern of a continuously settled region extending from Port of Spain to Arima, where formerly there were small nucleated settlements situated at intervals of approximately four miles. Density in Port of Spain is already high and inhibits further settlement. Improvements in transportation which have brought the whole region within easy commuting range of the city naturally have encouraged dispersion.

A similar but less pronounced phenomenon has occurred in the South around San Fernando, the second largest town. Suburban development has been mushrooming around the town in response to the demand for housing created by a growing population.

The counties of Victoria and St. Patrick can be coupled in the next bracket. Within these counties are located the
operations of the oil industry - refining capacity is concentrated in Victoria together with the cement and fertilizer plants, and mining in St. Patrick where the asphalt lake and the principal electrical power plant are located. The combination of these industrial activities forms the basis for industrial complexes in the two counties and accounts for the concentration of population there. A certain amount of sugar-cane production also takes place in Victoria.

In contrast County Caroni is purely agricultural, the sugar-cane industry being centered in this county. The density compares with that of Victoria and St. Patrick, but this is misleading since employment-wise the populations cannot be compared. Employment in Caroni is agricultural low-waged and subject to wide seasonal fluctuations, while in the other two counties the employment has a stable high-waged industrial basis.

At the other extreme are the counties of St. Andrew, St. David, Nariva and Mayaro which make up the eastern half of the island. Topography, geology and vegetative cover combine to make these counties generally unattractive for intensive settlement. Cocoa, coconuts and forest products, together with the products of a small fishing industry are the main productive enterprises in these counties. In addition, small pockets of activity are found in Mayaro wherever oil is being extracted.

These areas have lagged behind the other regions in development, to the extent of having a much poorer road and communications network, and poorer public facilities and services. Generally, housing and the physical development of
communities are simpler and of lower quality here. Under these circumstances the extremely low densities of occupation are not surprising, and it is certain that these 'depressed' areas lose heavily in population to the more 'advanced' regions of the country.

The pattern therefore is clear - an expanding urbanized sector given over to manufacturing and other productive enterprises and developed under the impetus of the export trade for sugar, oil products and asphalt, and a backward rural, mainly agricultural sector lacking in proper facilities and lagging in development.

**Physical Implications of Development**

Development of any kind is circumscribed by the physical realities of the country within which the development is taking place. And just as the physical realities define the limits and the form of development, so too, awareness of these physical realities should interject a measure of realism into the planning process.

It is significant that the countries where land use planning is most extensively practised at present - Israel, the Netherlands, Puerto Rico, and to a lesser extent Great Britain - are areas where land is limited and where the competition for space between activities is intense. This physical factor dominates development activities and forces upon the responsible authorities the recognition of the vital need for planning.

Trinidad and Tobago fall into the same category. The
intense competition for land among different land uses has already affected the progress of the Development Programme, and the availability of adequate land resources is likely to be one of the most critical determinants of the speed and the success of the development process.

The 1958 Report on the Development Programme makes reference to this point. The Report noted that before work could proceed on some new projects sites had to be acquired and made available, and specifically stated that "In the case of Education, difficulty of obtaining sites was a major bottleneck." Especially since "schools require much more extensive sites than other projects." The writer can personally testify to the intense competition which goes on between different executive Ministries, and the wasteful delays which result when suitable sites for projects are not available.

Land Utilization

No detailed survey of land resources in Trinidad and Tobago has ever been made. However, a reasonably complete picture of the distribution of land among the major use categories can be built up from the information available, and should suffice as a basis for a generalized assessment of the probable impact of future development on land resources.

Land utilization in 1958 in gross terms for Trinidad and Tobago is shown in Table 4. From the table it is seen that roughly 35 per cent of the land area is in agriculture use and the remaining 65 per cent is non-agricultural. The latter
category includes 26,000 acres under swamp (which is unsuitable for development except at very high cost), 575,000 acres covered in productive forests, and 125,000 acres covered by abandoned tree crops, bush and secondary growth. This leaves 97,000 acres or about 8 per cent of the total land area of the country for residential, industrial, communications, public and semi-public uses. This figure has remained constant since 1953.

**TABLE 4**

**LAND UTILIZATION IN TRINIDAD AND TOBAGO IN 1958**

<table>
<thead>
<tr>
<th>Use</th>
<th>Acres</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Agricultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential and Industrial Roads and Railways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public and Semi-public</td>
<td>97,250</td>
<td>7.7</td>
</tr>
<tr>
<td>Swamps and Inland Water</td>
<td>26,300</td>
<td>1.2</td>
</tr>
<tr>
<td>Forest</td>
<td>575,000</td>
<td>45.5</td>
</tr>
<tr>
<td>Abandoned tree crops, bush and secondary growth</td>
<td>124,650</td>
<td>9.7</td>
</tr>
<tr>
<td><strong>Total Non-Agricultural</strong></td>
<td>823,200</td>
<td>65</td>
</tr>
<tr>
<td><strong>Agricultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under Cultivation</td>
<td>330,200</td>
<td>26.0</td>
</tr>
<tr>
<td>Pastures</td>
<td>14,400</td>
<td>1.2</td>
</tr>
<tr>
<td>Semi-derelict crops and shifting cultivation</td>
<td>99,450</td>
<td>7.8</td>
</tr>
<tr>
<td><strong>Total Agricultural</strong></td>
<td>444,050</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total - Trinidad and Tobago</strong></td>
<td>1,267,250</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Annual Statistical Digest, 1958, Table 102 (adapted). Above figures are tentative estimates based on information derived from a number of different sources.
Thus, in 1958 when the population was 788,000, the gross density of occupation of developed land was 8 persons per acre. Doubling of the population within the next quarter century, which is certainly possible, will result either in a considerable increase in density in existing developed areas, or in the re-distribution of extensive areas among different uses.

Increase in density, which in some areas is perfectly feasible and may have positive advantages, presupposes maximum utilization of the resources of these areas and extensive development of their carrying capacity. Settlement in new areas means changes in land use and possible encroachment on land more suitable for other uses.

Assuming that it is desired not to encroach on agricultural land, which is reasonable in the light of the increased population which has to be supported, and that swamp areas and areas under productive forests are either naturally unsuited or undesirable for settlement, then the only available land for future development is the 125,000 acres at present covered by unproductive forest growth. However, in the Forestry and Agricultural sections of the Development Programme, there are proposals for expanding production, by reforestation and regeneration in the case of forests and by increasing acreages through improvement in soil care and production techniques in the case of agriculture. Both of these programmes entail increases in the quantity of land devoted to these uses. Thus, the assumption that at least part of the unproductive area will be utilized by these functions is not unreasonable.
It is clear that whatever assumption is made, development will increase the demand for land and create a pressure on land resources. It may be possible to get a fairly accurate picture of the magnitude of the future demand by considering one aspect of development - housing.

Housing is, of course, a useful and meaningful index of the progress of development. The adequacy of housing, both in quantity and quality, and the quality of the environment which surrounds the housing reflect both social and economic progress.

The following comment from the Development Programme is pertinent.

The shortage of housing may very well limit the output of the community and its improvement is an essential corollary to other measures ... which are to be taken to step up the productive capacity of the economy.9

We might add that housing in itself on the scale necessary and desired in a developing country can make a significant contribution to the economy. In Trinidad and Tobago, for instance, the recent proposal for mass housing is estimated to bring $91 million in construction and mortgage money into the country over a period of about three years.10 The stimulus which this investment will create for subsidiary activities in the construction industry is very appreciable. Moreover from a purely economic point of view housing represents savings and is an important source of capital stock. The importance of housing, in addition to its socially desirable effects, is underscored by these considerations.

The discussion of the housing question is instructive from
many points of view. It will indicate the demand for land—
land for housing units as well as land for complementary public
utilities such as roads, water and sanitary services, and for
public facilities in the form of schools, hospitals and health
centres, community and entertainment facilities, and land for
industrial and commercial activities which are necessary con-
comitants of residential development.

The conclusions drawn from this discussion will also be
indictive of the planning needs both with respect to the allo-
cation of land and the arrangement of land uses, and to the
planning of the physical elements of development.

Housing

"Here in Trinidad and Tobago, the housing shortage is
particularly acute and the condition of a large percentage of
all the houses is deplorably bad. The Housing Policy Committee
estimated in 1956 that 107,000 new houses will be required by
1965."

The above statement presents a gloomy picture of the
housing situation in Trinidad and Tobago which appears to be a
rather vague generalization in the cold light of a detailed
examination of the facts.

In 1946, the last year for which census figures are
available, the number of dwellings in Trinidad and Tobago
totalled 135,000. Of this number 37 per cent were one-room
dwellings and 23 per cent were two-room. In a country where the
average number of persons per dwelling was 4 and where 4 per cent
of the dwellings had over 5 persons per room, the conditions of
overcrowding revealed in the figures are staggering. Using the most conservative standard of say, one 8 feet by 10 feet room per person, (168 square feet of living space per person is recommended as a minimum by the World Health Organization), it is clear that only a small percentage of the population was adequately housed in 1946.

The situation appears even more deplorable when it is further noted that half of all dwellings were constructed of wood and about 32 per cent of tapia (a mixture of clay bonded with grass), materials which tend to deteriorate even with protection, which is seldom used in building construction in Trinidad and Tobago; and when it is further noted that 12 per cent of the dwellings had no separate sanitary facilities and another 55 per cent had pit latrines which cannot be considered a desirable type of sanitation, and only 30 per cent of the dwellings have a separate water supply. (Table 5).

The figures above are in gross terms. As might be expected conditions were relatively better in urban areas and considerably worse in non-urban areas. This fact of course reinforces the regional disparities. These figures give a fairly conclusive picture of housing conditions in 1946.

Between 1949 and 1958 the rate of construction of dwelling houses ranged from 2700 to 4000 units. This figure is estimated from the data on approved building plans, which is subject to two limitations; firstly, building plans are not required to be approved in all areas in the territory, some 20 per cent of the building work carried on is undertaken outside
### TABLE 5

**HOUSING IN TRINIDAD AND TOBAGO AT CENSUS 1946**

<table>
<thead>
<tr>
<th>Item</th>
<th>Trinidad and Tobago</th>
<th>Port of Spain</th>
<th>San Fernando</th>
<th>Arima</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of dwellings in each area</strong></td>
<td>135,384</td>
<td>21,419</td>
<td>6,876</td>
<td>1,909</td>
</tr>
<tr>
<td><strong>% of dwellings in each area</strong></td>
<td>100</td>
<td>15.8</td>
<td>5.1</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>% of total population in each area</strong></td>
<td>100</td>
<td>16.6</td>
<td>5.2</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Size:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of 1-room dwellings</td>
<td>37.4</td>
<td>47.1</td>
<td>35.9</td>
<td>36.8</td>
</tr>
<tr>
<td>% of 2-room dwellings</td>
<td>23.0</td>
<td>19.6</td>
<td>23.9</td>
<td>23.2</td>
</tr>
<tr>
<td><strong>Av. No. of persons per dwelling</strong></td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td>% of dwellings with 5 persons per room</td>
<td>4.4</td>
<td>5.4</td>
<td>3.8</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Materials of Construction:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of wood</td>
<td>49.7</td>
<td>42.3</td>
<td>78.1</td>
<td>8.7</td>
</tr>
<tr>
<td>% of tapia</td>
<td>32.2</td>
<td>-</td>
<td>3.8</td>
<td>80.0</td>
</tr>
<tr>
<td><strong>Amenities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with separate toilet facilities</td>
<td>63.1</td>
<td>42.6</td>
<td>65.0</td>
<td>68.9</td>
</tr>
<tr>
<td>of which water-closet</td>
<td>7.0</td>
<td>18.3</td>
<td>20.2</td>
<td>10.4</td>
</tr>
<tr>
<td>of which pit latrine</td>
<td>55.6</td>
<td>23.4</td>
<td>44.1</td>
<td>55.6</td>
</tr>
<tr>
<td>% with no facilities</td>
<td>12.7</td>
<td>3.5</td>
<td>16.4</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Water Supply to Dwellings:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Supply</td>
<td>29.3</td>
<td>96.2</td>
<td>96.0</td>
<td>99.7</td>
</tr>
<tr>
<td>Public Supply</td>
<td>46.0</td>
<td>2.8</td>
<td>3.5</td>
<td>-</td>
</tr>
<tr>
<td>Stream or Pond</td>
<td>16.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>St. George</td>
<td>Caroni</td>
<td>Victoria</td>
<td>St. Patrick</td>
<td>St. Andrew</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>----------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>31,716</td>
<td>15,474</td>
<td>20,761</td>
<td>18,395</td>
<td>8,196</td>
</tr>
<tr>
<td>23.4</td>
<td>11.4</td>
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<td>24.8</td>
<td>11.1</td>
<td>15.7</td>
<td>12.4</td>
<td>5.1</td>
</tr>
<tr>
<td>35.3</td>
<td>33.8</td>
<td>33.7</td>
<td>41.5</td>
<td>40.0</td>
</tr>
<tr>
<td>30.6</td>
<td>36.7</td>
<td>36.1</td>
<td>34.5</td>
<td>34.0</td>
</tr>
<tr>
<td>4.2</td>
<td>4.0</td>
<td>4.2</td>
<td>3.8</td>
<td>3.3</td>
</tr>
<tr>
<td>4.3</td>
<td>3.5</td>
<td>4.3</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>21.1</td>
<td>36.8</td>
<td>80.3</td>
<td>63.7</td>
<td>35.4</td>
</tr>
<tr>
<td>56.4</td>
<td>55.8</td>
<td>17.0</td>
<td>30.9</td>
<td>62.5</td>
</tr>
<tr>
<td>69.5</td>
<td>65.3</td>
<td>67.7</td>
<td>56.1</td>
<td>71.2</td>
</tr>
<tr>
<td>6.1</td>
<td>1.3</td>
<td>2.7</td>
<td>5.3</td>
<td>-</td>
</tr>
<tr>
<td>63.2</td>
<td>63.6</td>
<td>64.7</td>
<td>50.7</td>
<td>70.2</td>
</tr>
<tr>
<td>3.4</td>
<td>24.6</td>
<td>23.4</td>
<td>17.7</td>
<td>7.8</td>
</tr>
<tr>
<td>16.7</td>
<td>4.2</td>
<td>8.0</td>
<td>9.8</td>
<td>3.7</td>
</tr>
<tr>
<td>61.2</td>
<td>70.6</td>
<td>72.0</td>
<td>50.5</td>
<td>39.8</td>
</tr>
<tr>
<td>17.5</td>
<td>15.9</td>
<td>17.1</td>
<td>18.8</td>
<td>43.7</td>
</tr>
</tbody>
</table>

Source: Annual Statistical Digest, 1958, Table 75 (adapted).
prescribed areas; and secondly, a fair proportion of approved plans are never acted upon.\textsuperscript{13}

Assuming that new building takes place at the rate of 3000 a year over the extended period 1946 to 1956, a generous assumption in view of the above, then another 30,000 units were added to the stock of housing in that period. That is equivalent to an additional 22 per cent. In the same period population increased by 33 per cent, and the number of new households formed was 23 per cent of the total in 1946.\textsuperscript{14} There has clearly been no improvement in the housing situation in the period, and the evidence actually points to a deterioration.

Based on the rate of formation of family units, it is estimated that the number of new units required merely to accommodate the growth in population is in the region of 7000 per year. However, of the 3500 units built in 1957, some 40 per cent were replacements of buildings demolished or destroyed, with the result that the net addition to the housing stock only amounted to 2000 for the year compared with the 7000 units minimum required.\textsuperscript{15} The situation could hardly be much different for other years.

This brings us then to 1956, the date from which the housing needs were projected - 107,000 new houses, which may be read as dwelling units, by 1965. This means that over 10,000 new units per annum are needed over the 10 year period. The performance of the building industry has not even approached this target in the years since 1956. We must conclude therefore that the situation at present is even worse than before.
Assuming that 2 dwelling units per acre, the existing gross density of occupation, will prevail, the additional land required for say, 10,000 new units per year will be 5,000 acres or nearly 8 square miles of new settlement each year. Evidently, this phenomenal rate of construction is not possible; and densities will surely increase. However, regardless of any modifications to bring them in line with reality, these gross and rather rough estimates present a dramatic picture of the demand for land and the intensity of activity in the sphere of housing alone which will accompany the anticipated growth in population in Trinidad and Tobago in the future.

The need for new housing and complementary facilities and services, when studied against the background of present development and existing conditions and in the light of the future potentialities for development in the different regions, provides an insight into the nature and scope of the planning problems in Trinidad and Tobago. The areas presently developed - the Port of Spain/Arima complex in the north, San Fernando and surrounding County Victoria and the oil-asphalt belt of St. Patrick in the south, together with the sugar belt of the west-central sector centered on Caroni - these areas already support large populations and must be fast approaching their ultimate carrying capacity. They have, therefore, a limited capacity for further development, even if higher densities are desired and feasible.

The expansion of existing small rural settlements and the development of entirely new settlements are clearly inevitable
and very necessary. For financial, social and physical reasons, Trinidad and Tobago cannot allow this development to proceed haphazardly or merely in response to economic expediency.

Development on the scale contemplated and at the speed desired, will reproduce the mistakes of the past if it is not planned. Physical planning is required urgently in order to direct these development activities. Piecemeal planning by individual agencies is not enough. Working within the limitations of space which the small size of the territory prescribes, conflicts are bound to arise in the allocation of land for different uses and in the arrangement of interrelated activities. These conflicts must be resolved by one agency which has command over the total environment and is able to bring together all the elements into one picture conforming to some definite policy.

Such a policy for development of the physical environment is evidently needed. With the future requirements for land resources in mind, it will be necessary for the decision-makers in Trinidad and Tobago, to agree upon the desired form of the future physical environment of the country - that is, a composite picture of the needs and desires of all elements in the community. This statement of policy can then be translated by the planning agency into a design for the future physical environment, to be employed as the major guide for future physical development.

The need for a policy statement on development in physical terms cannot be overstressed and the value of such a document, even one which merely reflects broad policy decisions,
will be enormous and well worth the resources devoted to producing it.

Implications of Economic Development

Given the magnitude of the development needs in respect of population growth, the future size of the labour force, the housing demand, and the physical implications which have been previously discussed, the conclusion must be reached that rapid economic progress is necessary merely to keep pace with the anticipated increase in needs, let alone achieve the goal of raising the standard of living.

Gross per capita income in Trinidad and Tobago for 1957 was $684 WI per year at constant prices, which is an increase of 35 per cent over the base year 1951. The overall increase in the Gross Domestic Product is a good general indicator of the growth in the economy. The Gross Domestic Product at market prices doubled between 1951 and 1957 rising from $329 million to $659 million WI an average increase of 12 per cent.16

The contributions of different sectors to the Gross Domestic Product and the corresponding percentages employed in each sector are shown in Table 6.

The significant features about the above distributions are the disproportion between labour force in agriculture and its contribution to the economy, and the reverse disproportion in the mining sector. The oil industry dominates the economy with per capita output well over ten times that of any other sector.
TABLE 6

INDUSTRIAL CONTRIBUTION TO GROSS
DOMESTIC PRODUCT, 1957

<table>
<thead>
<tr>
<th>Industrial Sector</th>
<th>Income</th>
<th>Labour Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td>Mining (oil and asphalt)</td>
<td>37</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing (excludes refining)</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Building and Construction (includes public utilities)</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Services (transport, communications, distribution, finance, professional)</td>
<td>23</td>
<td>41</td>
</tr>
<tr>
<td>All Industries</td>
<td>95c</td>
<td>100</td>
</tr>
</tbody>
</table>

\(^a\) Economic Survey, Table 55.

\(^b\) Annual Statistical Digest, Table 35.

\(^c\) The disparity is accounted for by the variations in industrial groupings used by the Statistical Office. General Government Services contributed 8 per cent to GDP. Labour force in Government Services is distributed among items 4 and 5 above.

Agriculture is at present labour-intensive. Proposals for increasing productivity must envisage an increasing substitution of capital for labour as the industry is mechanised. This trend is already evident. The years between 1955-1957 witnessed a decline of 18,000 in the labour force, which is equivalent to 18 per cent of the 1955 figure.\(^17\)

The mining sector utilizes large amounts of capital and future expansion of this industry can provide only limited number of additional jobs. Thus it appears that the bulk of the increase in the labour force must find employment in manufacturing and tertiary industries.

This fact is fully recognised in the development policy
Limitations of land area and soil types and the experiences of history which indicate the imprudence of monoculture and of too great reliance on the production of primary agricultural commodities which are dependent on the level of economic activity in more highly industrialized countries and thus extremely sensitive to fluctuations in world production and world trade, dictate the need for diversification and the encouraging of the establishment of a variety of manufacturing industries.18

In pursuance of this policy the Government of Trinidad and Tobago has proposed several measures in the Development Programme. The most important of these measures is the creation of an Industrial Development Corporation, a statutory agency to implement the policy of industrialization.

Government does not propose to engage directly in production, but rather to provide the incentives and facilities to encourage private investment to establish and expand productive enterprises.19

Incentives will take the form of special legislation "in order to create parity with other countries where industries are already well established."20 A wide range of 'social' projects will be provided "to aid industrial development."

Other activities which the Corporation will undertake on behalf of Government will include:

The discovery and publicizing of our potentialities, the seeking-out and persuasion of prospective industrialists and attention to their needs with regard to information concerning such matters as labour, legislation, industrial relations, the recruitment of labour, housing accommodation for staff and . . . Liaison work between the several departments of the public services . . .21

The Government's role in industrial development is visualized as twofold - a catalytic form in providing the
facilities and services which are necessary for industrialization, and a persuasive form in providing attractive and favourable legislative incentives, such as income tax holidays, import duty exemptions, accelerated depreciation allowances, and so on.

The success of Government's role and the ultimate success of the industrialization programme will depend on the extent to which it can achieve a coordination and combination of many factors in time and space. Timing of construction of a variety of public facilities and their location in space must coincide with the decisions and plans of prospective industrialists to establish industrial enterprises in specific locations. Legislative incentives will have to be amended, revised and added to in order to keep pace with changing conditions both inside and outside the country, or to accommodate specially desired industries.

It is an acknowledged fact that location decisions should take into account a number of non-industrial factors - the quality and standard of housing, the availability of schools and entertainment facilities, the quality of the environment, the attitude of labour, and the general social and political atmosphere of the community. Insofar as it is the responsibility of Government to provide not only the legal and economic framework for industrialization but also the social, physical and institutional framework conducive to the process, then Government's role also includes the above factors.

Successful industrial development thus requires that a wide range of factors - economic, industrial, social, physical
institutional and cultural - be carefully arranged and fitted together into one total and complete pattern of development. To do this, requires first of all a well articulated policy of economic development which relates industrialization to all other aspects of the development process.

Having made the commitment to industrialize, the primary need is for the Government of Trinidad and Tobago to decide on a policy for industrialization. The place of manufacturing in the structure of the economy, both in terms of its contribution to the economy and the priority which it should have over other sectors in the competition for resources, the internal structure of the entire industry (that is, the type and size of different industries which are feasible and desired), the spatial distribution of industries in relation to other major activities - all of these decisions are essential parts of the policy for industrialization.

Agreement on a suitable policy presupposes expert and complete knowledge of the many factors upon which an industrialization programme can be built - the kind and extent of natural resources, the inter-relationships between the industrial sector and other sectors of the economy and specifically in Trinidad and Tobago the mutual demands of the public and private sectors on each other.

The policy will not only reflect the feasible characteristics arising out of given factors but will also embody desired goals. Thus, feasibility calculations on a road proposed in a certain part of the country might result in a
negative decision; on the other hand, a positive decision to locate the road in that area might be prompted by the desire to achieve some positive goal. An example can be quoted for Trinidad which refers to a transportation facility, the railway system, rather than industrial policy, but serves to illustrate the point just made.

The Government-owned railway system has been operating at a loss for many years. The decision to subsidize the system and keep it in operation is undoubtedly geared to desired objectives. The railway is still used for commuting purposes by a section of the population, for transporting goods and heavy equipment to certain parts of the country. It, therefore, provides a vital service which is worth the subsidy.

Built into the policy therefore will be these two sets of criteria - one set based on feasibility, the other on desirability. The translation of the policy into operative terms, such as speed of industrialization, the magnitude, location and distribution of public facilities to go with the industries, is necessary before policy can be applied in practice.

These two important tasks - research and analysis for the entire policy framework and translation of the policy into operative terms - obviously constitute a full time operation of a specialized and technical nature. Carrying it out therefore requires a special agency with the necessary expertise and competence, free from day to day administrative work and executive functions.

The functions which this agency will perform, while being
mainly economic, also have social and physical implications. The objective of industrialization is to provide jobs and increase the amount of goods and services available for distribution, and as such intimately affects the lives of the people of the community. In this respect it has a social content.

The success of industrialization also depends on changes in the attitudes and skills of the population, as well as a transformation in social organization and institutions. On the other hand, the process of industrialization, once started, tends to produce many of these changes and might further result in social disorganization and serious social pathologies.

Hence the social factor must be recognized as an essential component of the industrialization process. The population of Trinidad and Tobago is not bounded by strong traditions as are found in many developing countries. More than two hundred years of exposure to European and more recently North American influences has helped to inculcate many of the values of Western industrial society.

The result has not always been happy. It has produced a tendency towards conspicuous consumption and a laissez faire attitude. Spasmodic bursts of energy by individuals on a job are followed by self-imposed periods of inactivity once the immediate goal has been achieved. While there prevails among sections of the community an ethic of rising expectations, it is not accompanied by an ethic of hard work and frugality, and the willingness to forego present consumption for future benefits -- characteristics which have come to be regarded as
essential preconditions to economic progress.

At the same time attitudes held by certain sections of the community towards different kinds of labour, prompt many to seek 'socially desirable' jobs (for example, government service or commerce), rather than employment in the vocational trades, agriculture or even teaching. The result is an excess of persons trained for and seeking jobs in the clerical and commercial fields, while a shortage of qualified persons for the latter group exists.

Re-orientation of values and attitudes is what is called for in Trinidad and Tobago rather than any radical restructuring of the value system.

Following the dictum of a close interrelationship between these social factors and the process of industrialization, it is necessary to study the relationship in the particular context of Trinidad and Tobago and identify its most crucial and peculiar characteristics, so that recommended policies and programmes might be designed to maximize the benefits and minimize the undesirable effects of industrial development.

Decisions on development should therefore be exposed to the scrutiny of the social planner and benefit from appraisal and testing by social planning techniques against specific social objectives.

Industrial activity, together with its complementary facilities must be located in space, and thus demand for land is created. The requirements of industry are of a very specialized nature and the choice of suitable locations may be limited. At
times there may be conflict between industrial uses and other uses for available land resources. Further, since it is known that people follow jobs, the relationship between population, housing and industrial location comes into focus.

Physical implications also arise as a consequence of industrialization. Industrialization encourages urbanization and the rapid formation of new settlements and expansion of old ones. Disorders in the physical environment, such as blight, slums, traffic congestion, have been known to accompany rapid industrialization.

It is easy to see how the operation of these disruptive forces can have an adverse effect on the progress of industrialization, even to the point of minimising its ultimate objectives to such extent that wastage of resources would result. A situation such as imagined might arise where remedial measures might be so costly as to completely wipe out the anticipated benefits.

A policy of physical development to support the policy on industrial development is indicated. This is seen as the only means by which a rational and desirable allocation of land and arrangement of land uses and facilities will be achieved.

Physical development policy is best expressed in the form of a plan for development of the physical environment.

In a country where Government proposes to use its investment in social overhead to spark industrialization and economic development generally, location decisions on development projects such as power and water supplies, roads, sewers, can be better co-ordinated and made to conform to a logical overall
policy if these projects can be visualized in spatial form, that is, on a plan.

On the other hand, the implications of a decision by an investor can readily be checked against policy, and possible variations worked out with speed and ease. Proposals which may be desirable according to one set of criteria may well have conflicting repercussions when assessed on another basis. All the requirements can be met more effectively and decisions made more realistic if referred to a plan of the physical environment.

Moreover, the goals of economic development and industrialization may not be fully realized unless expressed on and related to a plan for physical development. An implicit goal of development in Trinidad and Tobago is to develop certain lagging or depressed areas - St. Andrew, St. David, Tobago, Nariva, Mayaro. Plans for economic development of these areas will certainly be influenced by physical factors - natural resources, soil and topography, vegetation - which may help or hinder development.

Similarly, any socially desirable policy for development must recognize the physical realities of the situation. One policy which is both desirable and necessary in Trinidad and Tobago is the re-distribution of population and economic activities. Decisions on suitable areas for future settlement which do not take into consideration the physical limitations must inevitably suffer from a lack of realism and are not likely to be wholly successful. By its very nature, the plan for the physical environment will embody all physical aspects of development.
We see, therefore, that the expansion of the industrial sector, which is a major component of the development of Trinidad and Tobago, is influenced by social and physical factors as well as purely economic considerations and that the process has wider ramifications in the social and physical aspects of development of the community, than merely in the narrow economic sphere. Hence the approach to planning for development must take into consideration economic, social and physical elements of development; in other words, the planning function must be integrated and comprehensive.

One point needs to be emphasised here. Because the responsibility for policy on economic activity and social activity is divided between the private and public sectors, the need for integrated planning is perhaps more urgent and critical in Trinidad and Tobago, than might normally be expected in developing countries where Government has the more powerful tools of direct participation in production.

In developing countries where Government engages directly in production, the establishment and location of important industries might form the nuclei around which further industry, even that owned by private enterprise, can be located. Thus control of location of industry and settlement is more easily effected.

In Trinidad and Tobago such powerful and direct tools are not available, and the indirect tools are naturally weaker and more uncertain in their effects. It is more essential therefore for Government action to be backed up by concrete policies founded on proper acceptable planning techniques. Controls and
directive measures should be firmer and more precise. There is therefore greater need for planning by central Government in Trinidad and Tobago.

The planning function in Trinidad and Tobago must be comprehensive: The economic element will be responsible for formulating and articulating a policy for economic development based on complete knowledge of existing conditions, future potentialities and projected needs; the social element will be primarily concerned with identifying the sociological ingredients of the development process and the social effects of development, with a view to maximizing the social benefits and minimizing the social costs and ill-effects; the physical element will help to translate policy decisions into goals expressed in physical terms, evolve a policy for physical development and produce a plan of the physical environment in accordance with that policy.
REFERENCES


2. Trinidad and Tobago, Central Statistical Office, Preliminary figures for 1960 Census.

3. Jamaica, Department of Statistics, Abstract of Statistics, No. 18, 1958. Table 1.10 (revised).


7. Sam R. Naranjit, "The Need for Creating New Jobs in Trinidad and Tobago," Lecture to Trade Union Congress Seminar, August 7, 1960. Mr. Naranjit is Research Economist of Trinidad and Tobago Industrial Development Corporation.


11. Five Year Development Programme, p. 35.

12. The family dwelling unit is used as the statistical unit; many houses shelter more than one family.


14. Annual Statistical Digest, Table 19.


17 Annual Statistical Digest, Table 19.

18 Five-Year Development Programme, p. 7.

19 Ibid, p. 16.


21 Ibid, p. 7.
CHAPTER III

PLANNING FOR DEVELOPMENT IN TRINIDAD AND TOBAGO

In the previous chapter, the development needs in Trinidad and Tobago were examined, and the requirements of the comprehensive planning function, as it is to be applied to the development effort, were established. In this chapter, planning for development as it is currently practised in Trinidad and Tobago is discussed, and an evaluation made to determine its effectiveness and the extent to which it satisfies the requirements of comprehensiveness.

The planning function is obviously influenced by the political and governmental traditions of a country. The first part of this chapter therefore is devoted to a discussion of the history of central government in Trinidad and Tobago, the local government system, and the history of planning within the general framework of government administration.

History of Government

Although Trinidad did not come under British rule until 1797, when it was captured from the Spanish, the influence of the British has been paramount in the growth of government in Trinidad. The system of government known as Crown Colony Government in which the Governor controlled the colony assisted by fully nominated executive and legislative councils, formed the
basis of the political life and administrative system of the country.

The system was founded on the basic principle of the strict separation of powers. The Governor, who was appointed by the Crown, was in charge of the executive branch of government; while legislative authority was vested in the nominated assembly.¹

It was not until 1924 that representative government was introduced in Trinidad and Tobago.² In that year the Legislative Council consisted of twelve officials, six members nominated by the Governor and seven members elected on a limited franchise. The Executive Council was comprised of four officials and one unofficial member, who was normally appointed from among the nominated members of the Legislative Council. Thus from the year 1924, Trinidad and Tobago had a Legislative Council with an elected minority, but no elected representative in the Executive Council.³

The source of executive power was therefore vested in the Crown, through its direct representative the Governor, and executive and administrative actions were initiated and directed by the Colonial Office. Legislative action was limited and did not reflect the needs of the community at large.

The direct consequences of this form of Government from afar, were a feeling of complete frustration in the community, permanent opposition to the Government, and a constant tendency to criticise government action.⁴ Local representatives on the legislatures and the people of the country tended to think of
the Government as 'they' in opposition to 'we'. This state of affairs obviously could not contribute to effective local political and executive action. A sense of participation in government among the people is essential to the growth of local initiative.

The beginning of the break with the old system occurred in 1937, under rather violent circumstances. In that year, Trinidad and Tobago, in common with other British West Indian territories, experienced crippling island-wide strikes and serious civil disturbances. This critical situation prompted the British Government to appoint a Royal Commission\(^5\) to investigate the circumstances surrounding these disturbances.

Two important consequences flowed from this investigation. Urgent recommendations were made for far-reaching programmes to improve and transform the social conditions in the West Indies; and changes in the organization of the administrative and political systems followed.

In the political and administrative sphere the recommendations of the Commission and the atmosphere of World War II, initiated changes which culminated in 1956 with the emergence of the first representative party government in Trinidad and Tobago. In the elections of 1956, for the Central Government, the People's National Movement, led by Dr. Eric Williams, won the support of the majority of the electorate and gained control of the Legislative Council.

The emergence of a strong popular party which commands the support and the confidence of the majority of the people is
generally considered as the last major precondition to responsible self-government. Recognition was given to this dictum by the British Government after the 1956 elections when, in the tradition of British parliamentary practice, the Governor invited the leader of the majority party to 'form a Government'.

The 1956 Constitution retained certain reserve legislative and executive powers in the hands of the Governor. He was obligated to follow the advice of the Executive Council (of which he was President). This Council was made up of two officials and eight elected members, one of whom was Chief Minister. For the first time the portfolio of finance was allocated to an elected representative. Elected members were also charged with the administration of certain government departments and were responsible to the Legislature for the executive actions of these departments. This Constitution provided a large measure of responsible self-government. This power was further extended in 1959 with the introduction of Cabinet Government. Executive action is now vested in the Cabinet (instead of the Executive Council) which is comprised of eight Ministers and headed by a Premier (all elected representatives). The two officials still sit in the Cabinet but are not entitled to vote. The Governor's reserve legislative powers were removed, but he retains general reserve executive powers.6

The culmination of the evolution of government in Trinidad and Tobago will be reached in 1961 when the new Constitution granting full internal self-government will come into force.

In keeping with the definition given earlier Trinidad
became a developing country in 1956, in that a responsible party with the majority support of the people was in control of the government, elected representatives exercised control over the administrative machinery of government, and the Government consciously undertook some form of development. The central Government possessed the power to plan since both legislative and executive action was in the hands of the elected representatives of the people.

Relationship with Federal Government

The growth of the West Indies Federation, which was established in 1958, and the possible assumption of more extensive powers by the Federal Government are factors which must be considered. It is possible that the growth of a strong Federal Government with both financial and constitutional power, may affect the existing relationship between the Federal Government and the Governments of the Unit Territories, and so, shift the power to plan for development to the former.

The Federal Constitution establishes the present relationship. In any federal system the keystone of the structure is the division of powers. Within the area of concern of this study, it is noted that in the fields of industrial development, currency, banking, extra-territorial fishing, borrowing by unit governments, income tax, customs and excise, and some other matters which have indirect implications for development, the Federal Government shares its powers with the Unit Territories, that is, both levels of government have power to legislate on
these matters, federal legislation taking precedence in cases of conflict.

The Federal Government has exclusive legislative power in the fields of personal movement, exchange control, insurance and federal borrowing. All other so-called 'residual powers' remain with the territories.

Federal powers, exclusive and shared combined, appear to be quite extensive. However, any attempt at planning for development is likely to be seriously handicapped because of omissions in its powers. Agriculture and practically the entire range of social services are excluded from federal jurisdiction. In order to plan effectively a government must be able to influence these functions. When the present financial limitations are added to these considerations, the full impact of the structures on the Federal Government in this direction is realized. In short the present Constitution provides for a 'weak' federation, in which the central governments of the territories have the real power to plan.

Subsequent changes in the division of powers, which seem inevitable, may adjust the balance of power between the Federal Government and the Unit Governments, but it is difficult at this stage to see how this will affect the situation with regard to the place of the planning function in government.

Available information suggests that planning for development will largely be confined to the central governments of Unit Territories, regardless of attempts to strengthen the power of the Federal Government.
The official view in Trinidad and Tobago is explicit on the question of division of powers. In making a case for the revision of the federal constitution, the Trinidad Government envisages a wider range of powers for the Federal Government with the objective of ensuring it the ability to undertake "the formulation of clear-cut and co-ordinated national policies so designed to permit the most effective use of the resources of the nation . . . "7 Added powers proposed for the Federal Government are primarily concerned with fiscal and monetary matters. On the other hand, the concurrent list of functions on which powers are shared, still includes the fields of industrial development, economic and social planning, social security, and agricultural research marketing and development. The unit territories will retain the functions of town and country planning, housing, roads, health, water and sanitation.8

Implicit in these proposals is the view that the Federal Government's role in the development process will be on the regional level and in broad policy terms while detailed planning and implementation will be the responsibility of territorial governments. The realism of this approach is underscored by geography; each territory is a geographic entity, and hence, may be regarded as a planning unit within the broader regional context of the Federation.

Local Government

It is appropriate at this point to give a brief picture of the structure of local Government in Trinidad and Tobago the
level below the Central Government and comment on its operation.

There are three forms of local government administration in Trinidad and Tobago: (1) the Port of Spain City Council, which administers the capital city, constituted a "city" by Law in 1914; (2) the Borough Councils of Arima, which was raised to the status of a Borough by Royal Charter in 1888, and San Fernando raised to a Borough in 1853; (3) the seven County Councils which were formed in 1953 to administer the eight counties and the island ward of Tobago. These are: the County Councils of St. George, St. David-St. Andrew, Nariva-Mayaro, Caroni, Victoria, St. Patrick and Tobago. Equivalent forms of incorporation in British Columbia are roughly - City, Town and District Municipality.

The range of functions exercised by the local government councils are rather limited. They include such matters as public health and sanitation, maintenance of roads and very minor capital works. They are also responsible for collecting taxes on property and charges for certain public services - water and sewerage works.

The utter financial stringency which has coloured the history of the local Authorities in Trinidad and Tobago provides a clue to their almost total ineffectiveness. Because of their inability to meet even recurrent expenses without grants from the Central Government, local government councils have enjoyed little real independence of action. The position may be summed up thus: "The problem has always been one of relating autonomy of action in financial matters to financial dependence on the Central Government for a large proportion of their funds and of relating
the grants paid by Government to the services rendered by the local authorities."^10

Despite efforts which are being made by the present Government of Trinidad and Tobago to put the Local Authorities on a more substantial financial footing, it will of necessity be some considerable time before these councils will be in a strong and independent position to take up a wider range of functions and discharge their responsibility effectively.

Indeed, it is doubtful whether the assumption of greater responsibility by Local Authorities, in their present form, will be in the best interest of the future development of the territory. There is no strong tradition of local government in Trinidad and Tobago, and municipal boundaries as they exist at present do not coincide with suitable areas for administration or planning. A case in point is the City of Port of Spain. In spite of the addition, through incorporation of contiguous areas equal to about one-third of its former area, during the decade 1930-1940 (only minor changes have been made since that date), Port of Spain today suffers from all the classic problems of centre-cities in exploding metropolitan areas. And any efforts on the part of the Port of Spain City Council to ameliorate un-favourable conditions within the city are subject to serious limitations because of restricted jurisdiction, and could only proceed with the active, but informal, co-operation of the Council of the County of St. George, in which the City of Port of Spain is situated.

Thus, we might conclude, that through expediency and in
the interest of future development of Trinidad and Tobago, all major decisions concerning development for the entire territory will be made by the Central Government. However we might assume that, within the limits set by Government, Local Authorities will participate in implementing plans for development. Moreover, this study does not intend to recommend constitutional changes of the kind that would be necessary to alter municipal boundaries, but proposes to concentrate on an organization for planning which can be superimposed on the existing structure, disrupting it as little as possible.

History of Planning and Administration

The planning function within central government, as a rational attempt to mobilize the resources and co-ordinate the activities of the community to achieve predetermined goals, has a very short history in Trinidad and Tobago. However, present practice of planning for development, such as it exists, is the outgrowth of administrative practices of the past. A brief review of the growth of the administrative system, in relation to planning, is necessary in understanding the approach to current planning practice.

Traditionally, the legislative and executive branches of government have been separate. The Legislature's functions were confined to the establishment of laws on a relatively limited range of matters; it assumed no direct responsibility
for executive and administrative matters. The entire machinery of government, which was directly responsible to the Governor, carried out its executive functions within the framework of a budget set by the Legislature. Beyond this the link between policy-making and execution was very tenuous.

The result was that government departments tended to introduce programmes independently, and not in direct response to the needs and desires of the community. Ad hoc decisions determined programmes rather than positive legislative policies. And since there was no single directing force, there could be no effective co-ordination between departments and the concept of concerted inter-locking actions designed to achieve defined goals did not apply to the activities of government.

Further separation of activities arose out of the economic structure of Trinidad and Tobago. These islands enjoyed with their sister islands in the West Indies, great prosperity during the eighteenth and early nineteenth centuries, based on the sugar trade. Since that time many forces have combined to produce a relative decline in the industry. The relevant facts here are firstly, external factors have always influenced the sugar industry, since it is export-oriented and susceptible to world conditions in the industry; and secondly, sugar production is primarily controlled by large companies owned by absentee proprietors and profits are exported.

Thus during the phase when sugar dominated the economy of the country, economic planning for a large important sector of the country was in the hands of private individuals whose
objectives were hardly ever in concert with the desires of the local community. (Indeed, they were often in conflict. Throughout the nineteenth century, the British Government, through its Governors, was frequently placed in the position of having to arbitrate between the planters and people. "Constant disputes occurred between the Governors and planters, who alleged from time to time that their interests were subordinated to those of the masses."\textsuperscript{11}

The relative importance of sugar in the economy of Trinidad and Tobago has declined steadily; the oil industry has now risen to take its place as the most important contributor to the economy (oil and asphalt contributed 37\% to Gross Domestic Product in 1957, while sugar contributed about 2.7\%). Influence over a large part of the economic sector is therefore concentrated in the hands of the few large oil companies.

The background influences out of which planning for development had to develop can now be summarized: traditionally, government actions and programmes have been conducted under the Colonial system of planning, which has been mainly concerned with the day-to-day functioning of the executive branch of government within the limits set by the annual budgets. Little co-ordination between departments existed and programmes reflected ad hoc decisions rather than positive policies. Economically the principle of laissez faire within a privately controlled economic sector has operated to influence strongly development decisions.

The first persuasive case for a new approach to develop-
ment and for a revision of the administrative system came from the West India Royal Commission. This Commission set up in 1938, had as its terms of reference:

To investigate social and economic conditions . . . and matters connected therewith, and to make re­ commendations.12

The recommendations published in 1940, emphasized certain social needs and proposed that financial aid from the Imperial Exchequer be provided and a special organization to administer the fund established. The case was stated in these terms: "There is a pressing need for large expenditure on social services and development which not even the least poor of the West Indian colonies can hope to undertake from their own resources."13 The Commission therefore proposed that the fund would be used to finance schemes for the general improvement of education, the health services, housing and slum clearance.

The "special organization" to administer this fund was called the Colonial Development and Welfare Organization. It did much to foster the notion of long range planning by insisting on proper programming of projects by the Governments as a condition for financial assistance. Specialists were to be included on the staff of the organization to provide assistance and guidance on the preparation of programmes. The range of specialists would vary according to the nature of the schemes, but would "include from the outset experts on education, finance, health, housing, income tax, labour and social welfare, a civil engineer and a statistician."14

From 1940 until it was formally dissolved in 1957, the
CDW Organization and its experts gave valuable assistance to the West Indian Governments in planning of specific programmes in the fields mentioned. The experts operated in an advisory capacity, they were all expatriate officers on contract for limited periods of time, and, in the difficult times of World War II and the immediate postwar period qualified personnel were in short supply.

Consequently, planning programmes formulated during this period left much to be desired. The planning was specialized instead of being comprehensive; implementation and continuity were not always assured; and programmes were designed primarily to ameliorate unfavourable social and economic conditions rather than promote maximum overall benefits.

Planning for development in Trinidad and Tobago has inherited these two planning approaches - Colonial planning with its strictly functional pragmatic approach, and Colonial Development and Welfare planning which was limited in scope, advisory in character and segmented in content.

Planning for Development

The Approach to Development

The scope and content of the planning function at any level of government are influenced by the policy for development of that government. This policy reflects the views of the party or persons in control of the government on the nature of the development process.

In September 1956, Trinidad and Tobago got its first
representative party government, when the People's National Movement gained a majority in the Legislative Council and formed the Government. This Party, supported by the majority of the electorate and enjoying the goodwill and allegiance of important factions in the community, brought to the task of administering the machinery of government a positive dynamic attitude based on a definite policy and an imaginative programme.

The principle statement of the Party's policy for development was contained in the Election Manifesto for the General Elections of September 24, 1956. Starting with a political programme as one of the critical factors in the development of the country, and which proposed the ultimate achievement of full internal self-government based on democratic principles and British parliamentary practice, the Manifesto outlined Economic and Social Programmes which embraced the major characteristics of the development of the country.

The following quotation indicates the approach to economic development, taken by the Government Party.

The principle features of the economic development of the country are
- The domination of the oil, sugar and asphalt industries
- The underdevelopment of such areas as St. Andrew-St. David, Tobago, Nariva-Mayaro, Ortoire-Morouga
- The limited contribution of pioneer industries to employment and national output
- The existence of 18,000 unemployed in a labour force of 270,000 in a population of 720,000 of whom 293,000 are children under 15
- The existence of considerable underemployment, amounting to 14 out of every 100 persons employed

The principle economic needs therefore are
- Provision of large number of new jobs
- Development of the resources of the entire country
Expansion of existing industries and introduction of new ones

The Social Programme was based on the argument that "Trinidad and Tobago require as their most urgent need social security for the citizen and his family." The four aspects of this programme envisaged greater social security and welfare, improved working conditions and formalized protection for the worker; an accelerated and expanded programme of housing; the improvement and re-organization of the educational system to meet the needs of the community; and, the encouragement of cultural activities and the provision of proper facilities for leisure.

These programmes are in keeping with the commonly accepted conception on the nature of development and lead to the adoption of the usual strategies. However, certain details of the programmes have specific bearing on the planning process. Under the economic programme it was proposed to undertake "a comprehensive economic survey" and "a specific study of industrial potentialities and prospects"; to establish four agencies to assist in the operation of the programme, including an Industrial Development Corporation and a Planning Bureau for economic and physical planning.

Apart from the vast increase in "social overhead" envisaged, the specific features of the social programme which are relevant are those dealing with the housing programme. "A vigorous Slum Clearance programme based on the recognition of the responsibility of Government (in this field) ..." was proposed, together with a programme of incentives to encourage house
building by individuals and private operators. It was also pro-
posed to set up a "National Housing Board to coordinate the
existing and disjointed agencies dealing with the problem," and
to revise the existing Planning legislation "to bring it in line
with modern conceptions of town and country planning."^18

No policy for physical development or settlement pattern
was included in the Manifesto. This was an important omission
since the economic and social programmes have physical implica-
tions which may strongly influence the success of these pro-
grammes. Moreover it will be seen that some of the proposals
were not implemented; in particular the proposal for a Planning
Bureau combining both economic and physical sections has not
been implemented in full. Only the economic section has been
emphasized and is now in operation.

Nevertheless, in comparison with the situation which
obtained in the past this policy statement was a considerable
improvement in the approach to the development of Trinidad and
Tobago.

The Planning Process

In pursuance of the stated policy the new Government
established a Planning Bureau early in 1957, under the Minister
of Finance, and charged it with the task of formulating the
present Five Year Development Programme. This Programme extends
over the period 1958 to 1962.

The duties which the Bureau performed in its early
stages were reviewed in the Report on the Reorganization of the
Public Service in 1959. These duties were
(a) the preparation of Development Programme on the basis of proposals submitted to it by Ministeries;
(b) the control of expenditure envisaged by the Development Programme;
(c) the execution of the Programme; and
(d) the studying of financial and economic problems that may be referred to it from time to time.\textsuperscript{19}

The Report comments that "It is unfortunate that the Bureau exerted its energies only to those functions outlined above and did not extend its attention to the study of the economic problems of the territory."\textsuperscript{20} It was thought that some of these functions could be better performed by executive Ministeries and departments.

This overlapping, which amounted to intervention in executive duties was undesirable, especially as it "led to the neglect of other essential functions in the planning organization such as studying trends in the economy and thinking ahead to formulate new development projects."\textsuperscript{21}

These shortcomings reflect the approach to planning and some vestiges of the thinking associated with Colonial planning. The primary function of the Planning Bureau was that of budgeting and financial allocation. The separate Ministeries submitted their proposals to the Ministry of Finance, and the task of reviewing and reconciling the programmes and allocating financial resources among the different programmes fell to the Planning Bureau. To make this the primary function of the planning agency is subject to two criticisms: (1) there was no guiding framework for preparation of programmes, no specific directives on needs or goals, and hence, the planning bureau had no devices for evaluating individual programmes; (2) the allo-
cations depended more on budgetary considerations than on a rational set of priorities.

The second function of the Planning Bureau was the supervision and execution of the Development Programme. This involved "trouble shooting" for bottle-necks in programmes, approving details of individual programmes, periodic checking on the progress of the Programme and resolving conflicts between Ministries for scarce resources. Obviously this left little time for long range planning and constant review of the programme.

Justification for concentrating on these two functions might be found in the desire to improve on the former practice of disjointed short-range efforts on the part of individual executive departments and introduce a more forward-looking, dynamic and co-ordinated effort. This attempt is commendable but the above activities do not constitute the only ingredients of the planning process.

This procedure is no more than intelligent Capital Budgeting of public investment in development projects and subsequently policing of the Programme in execution. In addition, there was need for the central agency in government to study the needs of the community for public facilities and services, and then allocate total resources to different sectors of Government activity, in the light of the country's ability to finance such a programme of expenditure. This is only one aspect of comprehensive planning for development.

The following comment is perhaps suggestive of the
approach to planning which is followed in the planning agency at the level of central government in Trinidad and Tobago.

The fact that it is described as a "Five Year Development Programme" rather than a "Five Year Development Plan" indicates the concept of development underlying the series of development projects which the Government has committed itself to undertake during the period 1958-1962.22

By this statement the entire approach to planning for development in Trinidad and Tobago stands condemned. Although the distinction is not readily understood or accepted, it might be said that a 'development plan' is precisely what is needed. In fact what exists is a Five Year Financial Programme.

In the first place, the stated concept of development does not agree with the one postulated earlier in the study. If this more all-encompassing conception of development is accepted, then clearly a plan for development implies a series of closely coordinated programmes for all functional components of the development process, which reflect specific goals and targets all carefully tested and interrelated.

A programme of a series of development projects to be undertaken within a specified period is just one aspect of such a plan -- that is, the Programme of Capital Works. The allocation of financial resources to these projects and the balancing of proposed expenditure against anticipated revenue are essential aspects of financial programming for capital works which form an important part of the plan for development. But financial programming on its own can hardly be regarded as planning for development. The fault here seems to lie in the adequacies of
the basic concept of the nature of development.

In response to recent proposals for the reorganization of the Public Service, the Planning Bureau, in 1960, became the Economic Planning Division of the Office of the Premier. It was felt that since planning cuts across the claims and interests of different Ministers, it was necessary to place the planning agency under the official who commands highest authority and has the power of veto, and so, remove it from the stream of inter-ministerial conflicts. Thus planning is now placed at the very source of policy making and executive power. This is an important change, since planning is now able to influence the decision-making process, and, hopefully, would enhance this process. Placing planning in this position in the Administration also gives its added power and authority.

The duties of the Planning Bureau envisaged by the Report were "to study the development of the economy and its various aspects as a basis for the preparation of long-term development plans for the economic progress of the country." It was also expected to "study the progress of the Development Programme and to recommend to the Premier adjustments in the light of changing economic conditions."\(^{23}\)

The Report also proposed that the Economic Planning Division "should be headed by a qualified Economist with some years experience." And also have other economists and a statistician.\(^{24}\)

Clearly then, the first need of planning was for an Economic Planning Division, attached to the Office of the Premier
and responsible for research and analysis of economic problems and the preparation of long-range economic development programme. These proposals have been substantially carried out.

However, the complementary proposals of the Report have not been implemented. The Report proposed the establishment of a Town and Regional Planning Division in the Office of the Premier "to work in close collaboration with the Economic Planning Division." This statement does not seem to endow the physical planning division with a status equal to that of the economic division. Physical planning is merely an adjunct to economic planning. Furthermore the two functions are obviously not visualized as a total process. The divisions are separate and no indication is given that the collaboration is formalized or obligatory. And social planning as part of this total planning process is not considered.

Five Year Development Programme

The Five Year Development Programme is the major product of the planning organization in central government in Trinidad and Tobago. Whatever the shortcomings it provides the most important guide for the executive activities of government in the field of major capital works, through the financial control which it makes possible. This function is vital and has contributed to the acceleration of development investment and construction. However, because of the gaps in the planning process, it is doubtful whether the financial resources devoted to the development effort are producing maximum benefits to the community and achieving the desired goals of development.
"The objectives of the Development Programme can be briefly summarized - more jobs, higher productivity of the workers, better amenities for the workers." These objectives are to be achieved through definite strategies, which can be broadly divided into 'social' and 'economic', with the emphasis on the former.

The attitude of the Government to its role in the development programme was made very clear in the following statement from the Introduction to the Five Year Development Programme.

The Government cannot guarantee that all the jobs needed will be created. Direct government employment is relatively small. What Government has to do is to create a framework which is favourable to investment, and to try to persuade as many persons as possible, here and overseas, to create new employment opportunities.

In other words Government intends to concentrate on those areas where private enterprise does not operate, and provide the social overhead "to create the facilities and atmosphere to assist in the development of the country by private initiative."

The principle of a private 'economic' sector and a public 'social' sector seems to be a continuation of the system which has been in operation up to the present. It appears to have served the community well in the past and Government has taken the decision to allow private enterprise to continue the task that it has already begun. This is in contrast to some other developing countries notably India, Pakistan and Israel where Government's participation in the economic development process is more direct. But there is reason to believe that this policy is more efficacious for Trinidad and Tobago.
The territory is fortunate in having an economic sector which has already attained a certain degree of development. The economy is not stagnant; and the major productive enterprises -- oil, asphalt and sugar -- are export oriented and will continue to provide a fairly stable base for the economy. Thus no radical measures, as might be necessary to get a stagnant economy moving, are needed in Trinidad and Tobago, and, further, there appears to be little prospect or need for any major change in the orientation of the main enterprises.

What is required is an acceleration, a diversification and a better distribution of productive enterprises to satisfy all the needs of the population. Government's primary concern is, therefore, the equitable distribution of the benefits of economic development and the maintenance and expansion of the private economy. For this reason the decision was taken to confine Government's role to that of promoting and stimulating the private economic sector, re-distributing the benefits of economic development and providing for all social needs. Government does not intend to become involved directly in productive enterprise which is competently and adequately conducted within the private sector.

However, it must be realized that the policy to maintain the dual character of the economy will affect the approach to planning and the scope and content of the process. This idea will be elaborated upon later in the chapter on the organization for planning, but it is mentioned here as being a critical factor in the evaluation of the current practice of planning for
Planning for a dual economy, with a strict separation of private and public activity is more difficult and complex. The promotion and control of productive activities, especially in the important question of location, have to be conducted indirectly. Since the rapid expansion of productive activities forms the basis for development of a country, planning for this sector of the community's life is critical. It becomes more so, where resources are limited and an exceptionally rapid rate of development is desired.

The Government of Trinidad and Tobago has definitely committed itself to this policy, and the emphasis is reflected in the Five Year Development Programme. For example, in the case of industrialization the view is taken that "Much of Government's assistance ... can only be granted through fiscal and financial measures." Similar policies of providing incentives to private investment is followed in other productive fields. In agriculture, fisheries and forestry emphasis is placed on the provision of facilities and services to encourage expansion. In the case of tourism, Government proposes to extend its incentives programme so that "private enterprise will be encouraged further to enter more enthusiastically into this field ..." 

Under the broad heading of Service Industries and Investments in Public Services, the Development Programme envisages the expenditure of "vast sums of money ... on services ...". The principle embodied in this programme is that "as far as possible,
every productive industry and every productive worker will enjoy the basic facilities which will enable them to develop their full potential and make their maximum contribution to the country's economy."

In total, the Development Programme which has emerged out of these policies is an impressive collection of projects which range from expenditure on some directly productive enterprises - planting subsidies, loans to agriculture and fisheries, provision of industrial sites, transportation and communication facilities - to purely social expenditure on education, health services, housing, and so on.

However, careful examination of the Programme reveals that it is no more than a collection of projects grouped under different functional headings. The Programme reflects the stated policy for development which has only been expressed in qualitative terms. The policy has not been reduced to quantitative targets and translated into physical terms where necessary. Allocations are mainly in block form which leads one to suspect that the details for the functional programmes had not been worked out fully. Moreover, the relationships between different parts of the specialized programmes are not clearly indicated and appear not to have been considered when formulated.

For example, in the section on the Description of Individual Projects where the details are outlined, it is noted that apart from a few projects which have been specifically sited, the majority of projects are distributed in a general manner to different regions or merely included under a general provision
with no indication as to location. This is clearly seen in the programme for housing. Gross allocations are made for the construction of approximate numbers of houses under the Self-Help Housing and Rental Mortgage schemes, but the particular areas where these houses will be located are not stated and there is no indication of the extent of the needs in specific areas which the programmes are designed to meet.

Under the heading Education, funds are provided for the construction of new schools, but the needs in relation to centres of population and the proposed areas to be served are not indicated.

The possible results of these omissions are that areas with the most urgent need may be left out, construction sites may not be available when needed, and the complementary facilities and services may not be provided as necessary.

In other words there is no evidence that the essential relationships between needs and contents of specific programmes have been considered, or that the different aspects of the programmes have been co-ordinated.

Specialized programmes for the Five Year Development Programme were largely prepared by the executive departments and agencies concerned. These departments and agencies were accustomed to plan their activities on a yearly basis in keeping with the requirements of the annual budget of Government, so that, planning for a five year period was a somewhat novel operation for them. Furthermore, it is doubtful whether they had the benefit of competent direction and guidance on the preparation of
their programmes since the Planning Bureau was only set up in 1957. This latter fact meant also that policy directives and specific targets had not been worked out to provide any general framework for the programmes.

The Planning Bureau had the responsibility of checking and refining programmes and of co-ordinating the proposals wherever possible. But it is obvious that without the basic data on needs and prospects, and without a set of reasonable standards, it was almost impossible to set up priorities, and to resolve conflicts or achieve any proper co-ordination. The result, therefore, was merely a series of development projects under different functional headings.

To sum up this review of the Development Programme; the goals of the Programme have not been carefully formulated in quantitative and physical terms to reflect needs and desires; functional programmes consist of specialized projects applied on an overall basis; there is no evidence of co-ordination between projects or between functional sections of the Programme; and too much emphasis seems to have been placed on the presently developed regions of the country with consequent neglect of other areas.

Experience indicates that in the early stages of rapid development the bulk of 'social overhead' investment is expended in the more highly developed areas of a country. The danger of this disparity in the distribution of 'social overhead' is greater in countries where there is no effective planning of the development process. The distribution of projects in the Development
Programme suggests that this situation exists in Trinidad and Tobago.

Under these circumstances, it is believed that the detailed allocations of expenditure on 'social overhead' and the distribution of financial resources were based on ad hoc decisions. It is possible also that allocations responded to the demands of political expediency, or were influenced by the special biases and persuasive powers of individual administrators.

The major criticism being made here is that the basic conflicts between the variety of influences which impinge on the development process have not been resolved. In fact no formal mechanism for resolving them exists. The inevitable results are unnecessary delays, wastage of energies and resources and impediments in implementation which slow down the progress of the Programme.

These shortcomings can be traced directly to the planning approach, the method of preparation of the Development Programme and the mechanics of implementation of specific sections of the Programme.

Current Planning Practice

The planning function in Trinidad and Tobago is compartmentalized. In addition to the Economic Planning Division, a number of special agencies which enjoy a high degree of autonomy within the statutory framework set by Government are responsible for certain functions which are important in the development process. And executive departments have a large measure of discre-
tion in programming within the broad limits of financial allocations.

Executive departments with the habit of working from yearly budgets on a more or less pragmatic basis, find it difficult to adopt long-range planning methods; and without the guiding force of an explicit policy for development, it is difficult to ensure co-ordinated action among them and avoid conflict. In addition, since there are no formal devices for review and co-ordination of the plans of the statutory agencies, combining their activities into a concerted effort becomes a difficult and speculative task.

A useful device for carrying out certain aspects of government policy is the Statutory Agency. These are special authorities created by legislative action and charged with responsibility for specific functions. They operate outside the normal administrative framework, but are ultimately responsible to Government.

Statutory Agencies have some definite advantages - greater flexibility, expertise in specialized matters - and can be effectively employed as tools in the development process. But since they deal with functions which have an important bearing on the development process their activities should conform to overall Government policies. At present Government control is exercised through the annual budgets of the agencies which have to be approved in advance, and, through their annual reports, which merely provide a check on activities in retrospect. These devices are not powerful enough to ensure that the activities of
these agencies are directed along the lines and in the areas desired by Government. The detailed programmes should be subject to the scrutiny and final approach of the co-ordinating agency of Government before they are implemented.

In addition, the activities of these agencies and departments have spatial requirements which may conflict with one another and with the activities of other government bodies and private enterprise. It is possible also that the undirected location of activities in space may impede rather than facilitate the overall development effort, and may produce undesirable physical results in poor design, overloading of public facilities, and congestion which would require excessive and unnecessary remedial measures.

For example, the Housing Policy enunciated by the Minister of Housing and Local Government in June 1960, visualizes the construction of mass housing for different income groups in different areas of the country. Some 5,000 houses are to be built over the next two and one half years. It appears that decisions as to the location of these houses depended on the needs in the more populous areas of the country, and on the availability of suitable Crown lands. It is planned to construct 3200 in the Diego Martin Valley just west of Port of Spain in the densely populated North-western region of the island of Trinidad. This project has tremendous implications for facilities, services, traffic, etc., in addition to the critical problem of the relationship between places of employment and residential areas.

Details of the Housing programme are the responsibility
of the Housing Department, construction being in the hands of private contracting firms. Public facilities and communications fall under separate agencies - electricity under the Trinidad and Tobago Electricity Commission; water, roads, main drainage and sanitation under the Water and Works departments; and telephones under the Telephone Company. And industrial promotion is the special concern of the Industrial Development Corporation.

It is easy to appreciate the vital need that exists for co-ordination between these diverse activities in order to bring the housing project to successful completion. All of this assumes that the decision on location is the 'correct' one and in accordance with what might be considered a desirable settlement policy.

Industrial Development Corporation - Location Policy

The Industrial Development Corporation (IDC) was established in 1959 as "Government's agent in the execution of industrialization policy." Its functions are to promote industry, to facilitate negotiations between industrialists and Government departments, to operate and advise Government on the incentives to industry programme, and to provide sites for industrial enterprises.31

In pursuance of the last mentioned function IDC selects and prepares suitable sites for the location of industrial activities. In a report "Memorandum on Lands Required for Industrial Estates" prepared by the Industrial Estates Officer (a Town Planner), proposals are outlined for the provision of industrial estates.
The location policy as stated is to create estates "in the areas where a ready labour supply is available, taking into consideration other locational factors such as proximity to power and water supplies, raw materials, main outlets for the industry as well as transport, communication and waste disposal." 32

Within this policy, proposals are presented for locating estates in and around the heavily populated 'conurbations' of Port of Spain and San Fernando to absorb the labour supply. Estates are also proposed for two so-called depressed areas centered on the towns of Rio Claro and Sangre Grande, which "would help to give focus to the towns and to raise the general standard of living in the area." 33 And finally, it is recommended that land adjacent to every major housing estate be reserved for industrial uses, the advantages being to help "raise the standard of living in these areas and at the same time assist in ameliorating the terrible traffic problem by diverting the regular of daily commuters." 34 The above proposals all refer to Trinidad; separate proposals are made for Tobago.

This industrial location policy is satisfactory as far as it goes. The Memorandum does not indicate what other factors influenced the decision on this policy, and since no formal mechanism exists for co-ordinating different functions, there is no guarantee that the related factors were considered. For example, experience has shown that location decisions, especially by private industrialists, depend on a number of factors over and above those stated. New industrial enterprises depend heavily on
external economies in their feasibility calculations; they also depend on non-industrial factors such as the quality of the environment, the availability of suitable housing, schools, entertainment facilities and other amenities. The experience of the oil companies in Trinidad is relevant in this respect. Oil company operations are generally located away from established urban centres and positive efforts have to be made to provide social facilities and amenities in order to attract and retain necessary staff and labour. The fact is that these "social" factors are absolutely essential to the successful operation of purely industrial enterprise.

The foregoing comment supports the argument for the co-ordination of industrial location policy with policies on housing, location of facilities and settlement. Again, this creates the need for integrating a variety of activities which are carried out by separate agencies and knitting them in a co-ordinated development effort.

**Physical Planning**

In Trinidad and Tobago, physical planning has traditionally been linked with the problem of slum clearance and housing. The formal relationship dates from 1938 when the Town and Regional Planning Ordinance was enacted. The operation of the Ordinance was granted to a statutory agency the Planning and Housing Commission. In addition the functions of this body are governed by complementary ordinances - The Slum Clearance and Housing Ordinance, 1940 and the Restriction of Ribbon Development Ordinance, 1942.
It is perhaps unfortunate that such a relationship exists, because past activities of the Commission have been directed, almost exclusively, to slum clearance and low-cost housing, and the layout of small housing estates. These activities have been very useful in attacking a serious social and physical problem, but the total effect on this problem, to date, has been slight. The complete solution of the problem of slums and housing demands an overall policy on urban redevelopment and housing and should be placed within the context of a general development programme.

The fault here is not with the officials and staff of the Commission, but rather in the approach and policy of Government to these problems. Both through an inadequate staffing policy and an over-emphasis on the housing aspect of the Commission's functions, its operations did not include any extensive planning. This situation further justifies the argument for a comprehensive approach to planning which would place all aspects of development in proper perspective, and ensure that each was adequately represented within the planning process.

The present Government has recently attempted to rationalize the situation by separating the functions of housing and physical planning. A new Department of Housing had been created and a Physical Planning Department is planned which will operate under the Town and Country Planning Ordinance, 1960. A discussion of the Ordinance and the possible implications for the new department are presented in the following section.

Other attempts at physical planning have been on a limited scale, as the discussion will indicate. Indeed these
attempts were merely unrelated examples of planning separate projects.

No reliable data is available to the writer, but the layout of the original town of Port of Spain, which now forms the downtown area, suggests some pre-planning. In fact since the town was built by the Spanish in the late 18th century, one can safely guess that its design was influenced by planning principles of Colonial Spain (samples of which are to be found throughout Latin America), which accounts for its rigid rectangular grid pattern of narrow streets. This is the best example of early planning for physical development in Trinidad and Tobago.

Over the years, extensions to the city of Port of Spain have not benefited from any great amount of planning influence. These developments were designed mainly by engineers and surveyors to engineering specifications and criteria and they rather unimaginatively followed the line of least resistance. Notable exceptions are the two layouts of high income and Federal civil servants' housing at Ellerslie Park, and a few high-income areas which by virtue of the large size of lots exhibit pleasant features almost by accident.

Outside the city there have been few attempts at planning with the exception of a number of housing projects, the best example being the Morvant Housing Scheme just east of Port of Spain, which was designed by the Housing and Planning Commission. Planning of roads and other public works is conducted on an individual project basis. Recently there has been much home building in suburban areas on land newly developed by
private investors. But here again the same pattern of layouts according to engineering specifications dominate.

Government has taken the lead in introducing "the best principles of Town and Country Planning, . . ." They have engaged "an outstanding Town Planner" to plan the development of the areas where the proposed mass housing will be situated.35

Trinidad and Tobago has inherited all the familiar planning problems of the past period of unplanned development. City slums, overcrowding, insanitary conditions, rapidly deteriorating urban areas, shanty towns, and traffic congestion on roads, are all in evidence, not to mention the unattractive quality of the physical environment in many parts of the territory and the generally unfavourable aesthetic impact of much of the developed area.

The need for physical planning is aggravated by the problem of intense traffic congestion within Port of Spain and on its major access roads. In addition, the situation on the westerly route will become more critical in the future since the proposed site for the new capital of the West Indies Federation is located about seven miles west of Port of Spain along this route.

**Town and Country Planning Ordinance, 1960**

The Town and Country Planning Ordinance No. 29-1960 was passed in the Legislative Council of Trinidad and Tobago on July 29, 1960. It repealed two Ordinances still in force which deal with the subject of planning - The Town and Regional Planning
Ordinance and The Restriction of Ribbon Development Ordinance. The provisions of the Ordinance will come into effect on a day to be appointed. As far as the writer is aware to date, the appointed day has not been set.

In essence, the Ordinance provides for "the orderly and progressive development of land in both urban and rural areas and to preserve and improve the amenities thereof; for the grant of permission to develop land and for other powers of control over the use of land....." (Preamble).

It confers on the Minister, charged with the responsibility for town and country planning, the duty "to secure consistency and continuity in framing and execution of a comprehensive policy with respect to the use and development of all land in the territory in accordance with a development plan....." (Sect. 3).

In its positive aspects the Ordinance provides broad powers for development. For purposes of the Ordinance development is defined as "the carrying out of building, engineering, mining or other operations in, on, over or under any land, the making of any material change in the use of any buildings or other land, or the subdivision of any land,..." Curiously and significantly the "use of land for purposes of agriculture or forestry;" is not deemed to involve development. (Section 8.2).

The Minister is required to carry out a survey of the whole of the Territory and not later than four years after the appointed day submit a development plan of proposals for use of
land and staging of development to the Legislative Council for approval.

A development plan shall include such maps and such descriptive matter as may be necessary to illustrate the proposals aforesaid.... And may in particular -

(a) define the sites of proposed roads, public and other buildings and works, airfields, parks, pleasure grounds, reserves and other open spaces;
(b) allocate areas of land for use for agricultural, residential, industrial or other purposes of any class specified in the plan; (Sect. 5.3).

This mandatory development plan is in effect a plan of comprehensive physical development for all of the territory in that it includes all the major land uses and main public facilities and works. There are also permissive provisions which include defining "an area of comprehensive development", being an area for redevelopment and relocation of population and industry, and making provisions for regulating, controlling, prohibiting and directing a long list of matters covering every facet of physical development. (Second Schedule pp 35-38). A development plan must be approved by the Legislative Council and at least once every five years the area must be resurveyed and the plan revised accordingly.

The all-embracing nature of the Ordinance is extended even further in the specific provisions for control of development of land, for preservation of trees and woodlands, for control of advertisements and for the acquisition and disposal of land for planning purposes.

From the brief description given above it is seen that the Town and Country Planning Ordinance, 1960 is a powerful piece of planning legislation which confers on the responsible Minister,
and on whatever planning agency is created, extensive functions and powers for physical planning.

Perhaps the first important point to be noted is that the Ordinance only provides for the strictly physical aspects of development. It does not, even by the broadest interpretation of the intent behind the legislation, make provision for social and economic planning. However, nothing in the Ordinance precludes the application of any of the tools of planning and the creation of specific devices to facilitate the carrying out of the provisions.

Another point to be emphasized is that Town and Country Planning, or what, in this study, has been called physical planning, will be the responsibility of a Cabinet Minister. This endows physical planning with a status equal to that of other Government functions. In addition, an Advisory Town Planning Panel is established to "advise the Minister on any matter within their knowledge or on which the Minister may seek their advice." (Sect. 4.3).

Finally, the Minister may "delegate to the council of any local authority his functions... relating to the grant or refusal of permission to develop land." (Sect. 10.1). Local Authorities are not granted any positive planning functions, and, moreover, the provisions of Part III - Control of Development of Land - apply equally to the development of land of any local authority. (Sect. 24). It is mandatory for the Minister to consult with the council of the local authority concerned in the course of preparing a development plan relating to any land within its jurisdiction. (Sect. 7.1).
Summary

Planning for development in Trinidad and Tobago fails to meet the requirements of a comprehensive planning process.

Firstly, no explicit Government statement has been made on a policy for overall development, expressed in a set of consistent interlocking goals and reduced to quantitative and physical terms. Without these specific objectives it is not possible to formulate individual programmes with any degree of confidence and assurance that they will in fact contribute to the total development effort. In other words, rationality and consistency cannot be achieved, since there is no firm system of priorities by which to evaluate specific programmes and resolve competing claims.

The industrialization programme may be in competition with the housing programme for land and material resources. The incentives programme may be beset by conflicts, since different types of industrial activities have different requirements. Capital intensive programmes may be competing for scarce financial resources. The obvious need is for rational techniques to assist in the decision-making process. The preparatory procedure of the Development Programme and the allocation of financial resources at present does not have such techniques built into it.

Secondly, the planning process fails to be comprehensive, since economic planning is divorced from physical planning and social planning is not attempted at all. No formal arrangements exist for co-ordinating the plans and activities of the
several agencies which are involved in development. Current practice of planning for development is compartmentalized. Development activities are highly interdependent, and unless there is some common basis for combining the activities into a unified whole and rationalizing the interrelationships, the development effort is likely to fall short of the objectives set.

Thirdly, current planning for development has been conducted on an overall territorial basis. Financial appropriations for all functional sections of the Five-Year Development Programme are shown as totals for the territory (with the exception of Tobago). Planning activities, in the Economic Planning Division and the Planning and Housing Commission, are conducted centrally for the territory as a whole. Tobago which is geographically distinct from Trinidad has been treated, since 1958, as a separate region within the overall framework. Budgets and programmes are prepared on a separate basis. The case for similar arrangements for regions within Trinidad will be proposed in Chapter V.

The problem of achieving balance and conformity between overall policies and local activities is not as critical in Trinidad and Tobago as it is in some other developing countries. The reason is twofold; the small size of the country permits a high degree of centralized control, and relative weakness of local government places all the responsibilities for development in the hands of the central Government.

Nevertheless, Trinidad and Tobago is characterized by sectoral imbalance, and overall policies have local implications.
Consequently, it behouves the planning agency at central government level to study these problems and formulate plans which take into consideration the varying needs of different regions and local areas of the country. This might mean applying different criteria in weighting to give advantage to 'depressed' regions over more advanced regions, or varying the incentives to industry in order to encourage the location of industry in one region in preference to another. The importance of these practices is specially critical since Government's role is merely to encourage private enterprise in industry and not to participate directly in production.

Fourthly, no policy on physical development has been enunciated. It has been shown previously that development produces changes in the physical environment and settlement pattern. The type of physical environment desired must be decided upon and compatible objectives formulated for programmes which will influence the physical environment. This has not been done for Trinidad and Tobago and the familiar results are in evidence throughout the territory - overbuilding of lots, urban over-crowding and slums, traffic congestion and uncontrolled growth in undesirable locations creating problems in providing facilities and carrying out remedial measures. In addition the quality of the environment is seldom attractive and desirable. The need for a policy on physical development becomes especially urgent when the size of the territory is considered in relation to its population.

Finally, current practice of planning for development in
Trinidad and Tobago lacks the consistency of the comprehensive approach. The Central Statistical Office has done some valuable work in gathering, collating and tabulating statistical data for the territory. However there are important gaps in these data from a planning point of view and much of the basic material on which the planning function depends has not been surveyed. There is need for a comprehensive planning survey.

Initial analyses and projections have been made for factors such as population and labour force in gross terms. Related future needs have not been projected and adjusted for other desired criteria to form specific goals and objectives. And regional analyses on which alternative programmes may be based have not been conducted.

Without these two basic steps in the planning process (survey and analysis), the design stage of the formulation of programmes is conducted 'in the dark'. Under the circumstances it is unlikely that maximum benefit to the community will accrue from development programmes.

No devices exist for evaluating the success of programmes and assessing the extent to which they are achieving stated or desired objectives. In other words, the social planning component is missing and therefore there is no evaluation or 'feed-back' stage to round off the planning process.

Indeed, there is no evidence that the essence of planning as a continuing function is recognised in Trinidad and Tobago. The Five Year Development Programme applies to a definite period 1958-1962, and there are no development plans which provide the
continuity and long-range view of the development process which is so essential.

It must be concluded that comprehensive planning by central government is not characteristic of the current approach to the development process in Trinidad and Tobago. Planning activities are conducted by different agencies with only loose and informal linkages between them, and a considerable amount of development activity takes place completely outside the sphere of Government influence. The only agency which enjoys a position of influence close to the centre of decision-making is the Economic Planning Division, which is in the Office of the Premier; but its functions are confined to the formulation of the Five Year Development Programme (which is merely a programme of capital investment), the review of programmes submitted by executive Ministries and departments, the coordination and preparation of annual budgets of capital expenditure, and 'trouble-shooting' in the implementation phase of the Programme.

These activities do not constitute comprehensive planning as defined earlier. It might be concluded, therefore, that although planning for development, in a limited sense, is carried on within Central Government in Trinidad and Tobago, the approach is not comprehensive, and present arrangements do not satisfy the planning needs as established in the last chapter.
REFERENCES


2. Tobago after changing hands several times came under British rule in 1814. In 1889, Tobago was amalgamated with Trinidad and administered by a Commissioner. It became a ward of Trinidad on January 1, 1899, and the two islands have been administered as the Colony of Trinidad and Tobago ever since that date. West Indies Yearbook, 1956, p. 165.


5. The West India Royal Commission, under the chairmanship of Lord Moyne, was set up in 1938 and made its preliminary recommendations in 1940. See West India Royal Commission, 1938–39: Recommendations (London: H. M. Stationery Office, 1940).


7. Trinidad and Tobago, Office of Premier, and Ministry of Finance, The Economics of Nationhood, (September, 1959), p. 3.

8. Ibid, p. 4.


18 Ibid.

19 Extract from the "Report to the Honourable the Premier by the Honourable Ulric Lee on the Reorganization of the Public Service", supplied by Trinidad and Tobago Government Information Office (September, 1959), paragraph 110.

20 Ibid, paragraph 111.

21 Broadcast talk on the "Work of the Economic Planning Division of the Government of Trinidad and Tobago", delivered on 16th August, 1960, by the Acting Head of the Division.


24 Ibid.

25 Trinidad and Tobago, Five-Year Development Programme, 1958-1962, p. 3.

26 Ibid, p. 4.

27 Ibid, p. 16.


29 Ibid, p. 15.


32 O. A. Prevatt, (Industrial Estates Officer), Memorandum on Lands Required for Industrial Estates (Industrial Development Corporation of Trinidad and Tobago n.d.), p. 1.

33 Ibid, p.3.

34 Ibid, p. 5.


36 Subsequently referred to as the Ordinance.
CHAPTER IV

APPRaisal OF PLANNING FOR DEVELOPMENT
IN PUERTO RICO

In this chapter a brief review and appraisal of the planning organization and the planning process in Puerto Rico are made, to see what lessons can be learnt for this experience.

The success of planning in Puerto Rico is amply demonstrated by the success of the country's development effort, and the high reputation of its planning organization and the recognition of the vital contribution which it has made to the development process are readily conceded in planning circles.

Brandon Howell, lecturer in Civic Design at the University of Liverpool, speaks for all observers when he calls it "one of the most energetic planning programmes of recent years... not only because it is part of a wider programme of economic development... but also because it has relied on the application of modern planning techniques and theory and the elaboration of a planning system of a very advanced kind."\(^1\)

Significance for Trinidad and Tobago

The special significance of the Puerto Rico experience for Trinidad and Tobago is due to the fact that the two countries are very similar in many respects.

Both are small islands in the Caribbean chain and have a
similar history of development; density of settlement is high in both countries; and they have both undertaken a development programme designed to develop limited resources to match growing populations.

Further similarities between the two countries are illustrated by the geographic, social and economic indices shown below.

TABLE 7

COMPARISON BETWEEN PUERTO RICO AND TRINIDAD AND TOBAGO
BY GEOGRAPHIC, SOCIAL AND ECONOMIC INDICES

<table>
<thead>
<tr>
<th>Index</th>
<th>Puerto Rico</th>
<th>Trinidad and Tobago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>West Indies</td>
<td>West Indies</td>
</tr>
<tr>
<td>Latitude</td>
<td>17 - 18 degrees North</td>
<td>10 degrees North</td>
</tr>
<tr>
<td>Longitude</td>
<td>65 - 67 degrees West</td>
<td>61 - 62 degrees West</td>
</tr>
<tr>
<td>Area</td>
<td>3435 square miles</td>
<td>Trinidad 1863) 1979 square</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobago 116) miles</td>
</tr>
<tr>
<td>Climate</td>
<td>Tropical</td>
<td>Tropical</td>
</tr>
<tr>
<td>Average Rainfall</td>
<td>77 inches yearly</td>
<td>Trinidad: 90 inches yearly (east belt) 67 inches yearly (west belt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobago: 87 inches yearly</td>
</tr>
<tr>
<td>Temperature</td>
<td>Highest annual mean 86 degrees Fahrenheit</td>
<td>Highest annual mean 89 degrees Fahrenheit</td>
</tr>
<tr>
<td></td>
<td>Average minima 67 degrees Fahrenheit</td>
<td>Average minima 72 degrees Fahrenheit</td>
</tr>
<tr>
<td>Population</td>
<td>2,293,000 (1960) Total</td>
<td>834,600 (1960)</td>
</tr>
<tr>
<td></td>
<td>Urban 50.2 per cent</td>
<td>50 per cent (estimated)</td>
</tr>
<tr>
<td></td>
<td>Rural 49.8 per cent</td>
<td>50 per cent (estimated)</td>
</tr>
<tr>
<td>Annual Growth</td>
<td>0.39 per cent</td>
<td>2.8 per cent</td>
</tr>
<tr>
<td>Density</td>
<td>650 persons per square mile</td>
<td>425 persons per square mile</td>
</tr>
<tr>
<td>Gross</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 7 Continued

<table>
<thead>
<tr>
<th>Index</th>
<th>Puerto Rico (U.S.)</th>
<th>Trinidad and Tobago (W.I.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Product</td>
<td>$1,295 Mn (1959)</td>
<td>$523.4 Mn (1957)</td>
</tr>
<tr>
<td>Per Capita</td>
<td>$556</td>
<td>$684 (equiv. U.S. $400)</td>
</tr>
<tr>
<td>Private Consumption</td>
<td>90 per cent</td>
<td>61 per cent</td>
</tr>
<tr>
<td>Labour Force</td>
<td>22.8 per cent of pop.</td>
<td>34.7 per cent of pop.</td>
</tr>
<tr>
<td>Employment in</td>
<td>25 per cent of labour force</td>
<td>22 per cent of popu-</td>
</tr>
<tr>
<td>Agriculture</td>
<td>force</td>
<td>lation</td>
</tr>
<tr>
<td>Unemployment</td>
<td>14 per cent of labour force</td>
<td>7 per cent of labour force</td>
</tr>
</tbody>
</table>


^bTrinidad and Tobago, Central Statistical Office, Annual Statistical Digest, 1958.

With these similarities firmly established, it is now necessary to record the differences. These arise out of Puerto Rico's peculiar political and economic relationship to the United States and have a direct influence on the course of development. In this one respect, perhaps, the situation in Puerto Rico is unique, and not applicable to Trinidad and Tobago or any other country embarking on a similar development effort.

The political evolution which started in 1946 with the appointment of the first native-born Puerto Rican Governor, "reached its climax when the U.S. Congress approved Public Law 600, authorizing the people of Puerto Rico to draw 'in the nature of a compact' its own constitution and through it exercise complete autonomy in local affairs."^2

Under this political status the island enjoys complete autonomy in local affairs, freely associated with the United
States. Its people continue to be citizens of the U.S. and, similar to citizens of other states, are subject to federal legislation, such as grants-in-aid and conscription. Free trade with the U.S. remains in effect, but Federal internal revenue laws do not apply and Puerto Ricans are exempt from federal income taxes on income derived from sources within the island. Furthermore, federal excises collected on articles manufactured in the island and shipped to the U.S., as well as custom duties collected on foreign merchandise imported into the island are recovered into the Commonwealth treasury for whatever purposes the Legislature may desire. These arrangements provide a secure base for the economic development of Puerto Rico.3

This factor (political relationship) has been significant in two ways. Firstly, these relationships have made Puerto Rico a part of the domestic economic area of the U.S., thereby enabling the Commonwealth to share quite directly in U.S. economic prosperity.4

The second way is through the federal disbursements which Puerto Rico shares with other states, such as funds from the Federal Housing Authority.

Common citizenship with the peoples of the U.S. mainland also has provided Puerto Rico with an outlet for migration. This has an effect not only on the general demographic situation, but provides a balance between employment opportunities and labour force, since "the volume of migration since the end of World War II has been sufficient to absorb most of the net annual increase in the labour force ..."5

While we must agree with the observation that "Puerto
Rico is a special case..." and that "the lessons . . . will have to be applied with discrimination", it is also agreed that the application of a rational planning process has played a vital role in the development of the country, and the differences outlined do not alter the importance of this contribution.

This review focuses attention on the lessons to be learnt from the Puerto Rico experience in the application of an integrated planning approach to the development process and with this in mind the following evaluation is both relevant and useful.

Background Conditions in Puerto Rico prior to 1940

In order to appreciate fully the role which planning played in the development process, and to provide a frame of reference for assessing the success of the development effort, it is necessary to describe the background conditions which existed in Puerto Rico when the development programme was initiated. This discussion of the background conditions also provides an understanding of the pre-requisites for development in that country.

The turning point in the social and economic development of Puerto Rico may be thought to occur in 1940 for a variety of reasons. There appear to have been the converging of political, economic, social, and administrative forces during the decade of the 1940's which made it possible to make a sharp break with the stagnation of the past.

In the decade prior to 1940, Puerto Rico's agricultural economy had ceased growing mainly due to the adverse effect of the great depression on the market for its basic crops, sugar and coffee. Income was low and unemployment high. When the
United States limited the import of sugar in 1934, there resulted a severe drop in per capita income from $122 for the year 1929-1930, to $86 for the year 1932-33.

At this time employment in agriculture was more than 38 per cent of the labour force and unemployment stood at 11 per cent.

The prospects for development during this period presented a rather black picture.

Puerto Rico's exploitable economic resources were limited to its soil, greatly depleted, its manpower, mostly unskilled, and perhaps, its climate and scenery. It was poorly endowed with energy resources and with the raw materials on which an industrial economy could be based.9

Start of the Development Effort

In the midst of this critical situation in 1940, the Popular Party, headed by Luis Muñoz Marin, the present Governor, came into power with "a new goal in mind, namely to better the economic and social conditions of Puerto Rico."10 This was virtually the starting point in Puerto Rico's development process.

Prior to this, efforts to alleviate the conditions in Puerto Rico were made under the influence of the New Deal of the President Roosevelt's administration. Puerto Rico shared in the programme of relief and reconstruction, and specifically the Puerto Rico (later Federal) Emergency Relief Administration (F.E.R.A.) was set up in 1933, and the Puerto Rico Reconstruction Administration (P.R.R.A.) was established in 1935.11

With the new political party in control and having made
the initial commitment to undertake some form of development to improve social and economic conditions, Puerto Rico became a "developing country". Starting with this initial change many important events took place which have contributed to the success of development in that country.

The imaginative leadership which the Popular Party brought to the country and to its development effort is well illustrated in the following comment:

It is clear that one of the sources of strength has been the appearance on the scene of a dynamic leadership, with a political party organization dedicated to the achievement of certain social and economic goals through the democratic process. In addition leadership was not trapped by a rigid formula which tended to generate an excess of nationalism. The leadership was sufficiently flexible so that when a particular method failed, others were tried until the right combination was found.12

This is in keeping with the dynamic spirit as expressed by Luis Muñoz Marin himself; the recognition that they must always be "changing, improving, and intensifying . . .", "to correct . . . mistakes and press forward."

The rise to power of Muñoz Marin in 1940 and the appointment of Rexford Guy Tugwell as Governor of Puerto Rico in 1941 was a fortunate combination for the island.

Muñoz Marin's outlook was coloured by his exposure to the reform programmes of the Roosevelt Administration over a number of years when he lived in the United States. He was instrumental in getting the P.R.R.A. established.13

... Governor Tugwell had been a prominent member of the New Deal, he had been responsible for the creation of the Resettlement Administration and later had been Chairman of the New York City Planning Commission. Moreover he was familiar with conditions in Puerto Rico and came prepared to help, devise and administer the
programme of reforms and development to which the new Legislature was committed.\textsuperscript{14}

Tugwell was largely responsible for the introduction and drafting of the first Planning Act in 1942 (to the extent of drafting substantial portions of the Act himself), and was instrumental in getting the Act passed by the Legislature. In this he was actively supported by Luis Muñoz Marín.

The influence of Governor Tugwell was also largely responsible for the appointment of a number of well-qualified North American planners to work in Puerto Rico in the early years. Some of these planners were sent out by the United States National Resources Planning Board to advise the Insular government on the requirements of a planning programme, and many of the planners stayed on in Puerto Rico as consultants. Thus the planning process benefited from the start by having well-qualified staff.

Perhaps the most notable characteristic of the development process in Puerto Rico is that the essential nature of development seems to have been thoroughly understood from the very start of the process and the goals were explicitly stated.

Harvey Perloff has identified some of the main features:
Firstly, "social reform", which was concerned essentially with distributive justice, especially with respect to land. Other features

Have included measures to protect workers and to strengthen the position of labour unions ... to provide public assistance and the beginnings of a social security system, to regulate basic industries, and to develop a more progressive tax structure.\textsuperscript{15}

In addition there have been programmes for the direct
promotion of economic development and an expansion of agricultural production. A third important feature of the programme has been the "improvement of the public services and facilities, both to lay the foundation for economic expansion and to encourage social progress."\textsuperscript{16}

With the political transformation of the 1940's providing the motive force, Puerto Rico launched its development programme which embodied a wide range of activities and entailed a variety of changes.

Integrated planning was the factor which turned this programme into a coherent co-ordinated plan for development. The following comment underscores this point.

A significant aspect of the far-reaching developmental effort has been the institutionalization of co-ordinating and directing devices in the form of a Planning Board and a Budget Bureau. These staff agencies, through their central role in the design of governmental programmes and in the guidance of public expenditures, . . . have served to tie the widespread activities of the insular government into what can be justifiably be characterized as a programme of planned development. (Writer's emphasis).\textsuperscript{17}

\textbf{Evaluation of Planning Organization and Process}

\textbf{Powers and Duties of Planning Board}

Planning was first institutionalized in a comprehensive and systematic way in Puerto Rico in 1942, when Act No. 213 created the Puerto Rico Planning, Urbanizing and Zoning Board. Succeeding references and discussion are based on the revised version of the Act, officially entitled the "Puerto Rico Planning and Budgeting Act," which was published in 1960 by the Planning Board.
The powers granted under the Act indicate quite clearly the nature and scope of the planning task envisioned, and the type of organization which was considered necessary to undertake the task is revealed in the purposes outlined for the Planning Board.

-General Purpose.- The powers granted under this Act shall be exercised for the general purpose of guiding such a coordinated, adequate and economic development of Puerto Rico, as will, in accordance with present and future needs and human, physical and financial resources, best promote the health, safety, morals, order, convenience, prosperity, defense, culture, economic soundness and general welfare of the present and future inhabitants, and such efficiency and economy in the process of development and in the distribution of the population, of the uses of land and of public improvements as will tend to create conditions favourable thereto.18

The Planning Board has the following duties:19

1. to prepare and adopt a Master Plan for the development of Puerto Rico.

2. to prepare, adopt and enforce the necessary regulations to implement the recommendations of the Master Plan.

3. to adopt zoning regulations establishing the use and development of public and private lands and buildings.

4. to adopt regulations which will govern the subdivision of land.

5. to adopt special projects such as, rehabilitation and redevelopment, and development of industrial towns; drainage districts; irrigation districts; etc.

6. to prepare annually a Six-Year Financial Program, containing descriptions of proposed and pending capital improvements and current expenses of the Government.
7. to prepare for the Governor, yearly, a Financial report embracing a financial analysis of the development of the last fiscal year in the field of private economy and the manner in which such development affect and in turn are affected by government's financial programme.

8. to compile, analyze and publish periodically statistics on payment balance, net income, gross product, and general economic indices.

Organization

Figures 4 - 7 present a graphic picture of the organization for planning in Puerto Rico and of the *modus operandi* of the planning process.

A more detailed examination of this organization and the process will be made when the evaluation of planning for development is undertaken. However the importance attached to the planning function must be noted here.

With the establishment of the Planning Board, planning was introduced as a regular and systematic government function as part of the Governor's office. Rafeal Picó, Secretary of the Treasury, Commonwealth of Puerto Rico (formerly Chairman of the Planning Board) considers this essential. "Planning must always occupy a central position, close to the First Executive so that it can influence the basic decisions to be made in the preparation of the development programme."20

He goes on to emphasise that "this central planning organization must have powers for comprehensive planning and should have an absolute backing from the Chief Executive . . ."21
This makes it both effective and legitimates its actions. This requirement was met in Puerto Rico.

The foregoing concept should not be interpreted as an argument for a super-agency which will operate above or outside the jurisdiction of normal government administration. This is precisely what should be guarded against. The central planning organization should at all times be intimately bound up with the regular processes of government.

While recognising that the planning authority must have freedom of action and full responsibility if it is to do its work properly, Howell states that

It is essential that it be within the normal administrative machinery of government, and it must recognise that one of its most important functions should be to give technical advice to the executive and legislative body, from which it receives delegated powers.22

Telesforo Carrero lends support to this point of view in the following statement:

In the planning process, the Governor, with the direct assistance of the Council of Secretaries and the Legislature of Puerto Rico are the ones in charge of the establishment of policy, aims, and objectives of the different programs to be included in the general plan prepared by the Planning Board. The latter with the assistance of other government agencies prepares the basic data and the counselling or guidance devices to enable the establishment of the above said policies, aims and objectives.23

The Planning Process

Figure 4 presents graphically the planning process as it is applied to the development process in Puerto Rico. This chart gives an indication of the steps which are followed through from policy formulation to implementation of the Master Plan and pro-
EL PUEBLO
• ELIGE SU GOBIERNO
Y SU PLATAFORMA

THE PEOPLE
• ELECTS ITS GOVERNMENT
AND ITS PLATFORM

THE PLANNING PROCESS
SOURCE: PUERTO RICO PLANNING BOARD
grammes. The process as outlined in the chart follows the classic definition of the planning process - goal formulation; survey, analysis and design (plan); execution. The final stage of evaluation and "feed-back" is one which is often omitted, both in theory and in practice. In fact, this stage has only been recently introduced into the planning process in Puerto Rico.

How is the planning organization geared to carry on this process? What functional arrangements exist in the organization for performing and coordinating the different aspects of the planning process?

The changing requirements of the planning function have produced changes and refinements in the structure of the Planning Board. Some of the changes are reflected in Figures No. 5 - 7, and help to trace the evolution of the planning process.

By 1957, the Board had expanded to the point where there were, apart from the administrative, legal and secretary's offices, five technical line divisions. (Figure 5). In 1958, there was a re-organization of the line divisions increasing the number to six. (Figure 6).

The Divisions of Engineering and of Finance and Master Plan were reorganized into three Bureaux - Public Works Programming, Projects Revision and Integrated Planning. The two significant changes were the addition of divisions of Special Studies in Integrated Planning and Social Analysis, under the latter Bureau.

Finally, as a result of the Board re-assessment of the
planning process, the approach to their programmes was re-orientated to a recognition of the need for Regional Planning and Social Planning as crucial phases in the comprehensive process. A new Bureau of Regional Planning has been created and a division of Social Planning has been added to the Bureau of Economics and Statistics.

The present (1960) structure of the Planning Board appears in Figure 7.

The changes in organization of the Board appears to be closely related to the different stages of development. And in particular its activities tend to reflect the changing emphases of the development programme.

During the decade of 1940's, the main emphasis of the Board was along lines of physical planning. This was a response to the objective of creating a proper atmosphere for industrialization, and the early activities of the Planning Board were: gathering and classifying data for plans in respect of physical improvements; review of government projects to ensure conformity to the plan and public policy; and preparation of six-year financial programmes.

Later when 'Operation Bootstrap' was launched in 1948, the Board's activities expanded in the direction of economic planning. The function of economic research was added and the fixing of priorities for the realization of the different projects was started.

Having positively achieved a certain degree of development, Puerto Rico, in 1961, is already engaged on the early
OFICINA DEL GOBERNADOR
JUNTA DE PLANIFICACIÓN DE PUERTO RICO
GRÁFICA FUNCIONAL

7

SOURCE: PUERTO RICO PLANNING BOARD 1960
stages of 'Operation Serenity', which is "aimed in a new direction in order to achieve an appreciation of the attained and unattained goals of the dynamic program for better income."\(^2\)

This is a programme of 'cultural and spiritual development' and it is certain that the newly created division of Social Planning "which will be in charge of appraising programs now in progress with a view to determining to what extent social objectives are satisfied", will play an important role in the new approach.

The need for keeping the planning process flexible and responsive to the changing demands of the development situation, is quite clearly demonstrated in the Puerto Rican experience.

**Activities of the Board**

It is possible to deduce from the outline of the powers and duties of the Board that it must engage in a variety of complex and inter-related activities. For the sake of conciseness these activities are discussed under the following general headings: Master Plan preparation, social and economic planning, physical planning and fiscal planning.

**Master Plan Preparation**

The foremost function of the Planning Board is the preparation of the Master Plan for Development of Puerto Rico.

Successful development requires the solution of a multiplicity of complex problems. These problems are not merely concerned with the economic sector of the country, but also involve
problems of a legal, political, social and physical nature. The solution to the problems obviously creates certain demands on the resources of the country, and the pressing need arises for some systematic way of resolving the conflicts which must occur in the programmes designed to eliminate the problems.

Integrated planning is the best means of identifying the problems, determining the needs, resolving the conflicts, and then allocating the resources for different programmes on the basis of criteria which depend on the desired goals.

The requirements of the Master Plan for development of Puerto Rico and the responsibilities of the Planning Board in preparing it provide the framework within which these varied and complex operations can be effectively carried out.

The scope of the Master Plan function is laid out in Section 8 of the Planning Act.

The Board shall prepare and adopt a Master Plan, which shall show, with any accompanying maps, charts and explanatory matter, its recommendations for the development of Puerto Rico and may include the general location, character, and extent of the land, minerals, water, vegetation and animal life and their present and possible future utilization . . . and of residential, commercial, recreational, manufacturing, transportation, communication, institutional governmental and public utility facilities and operations by whatever desirable categories, and their possible future utilization and development for these or other purposes and for the general welfare.25

The Master Plan is not a single document nor is it a rigid formula for the development of the country. Rather it is a flexible planning instrument comprised of a set of plans, each for a different aspect of development, with supporting statistical, factual and descriptive data.
The Master Plan embodies the basic policies adopted by the Board to guide the physical and economic development of the island. In developing these policies due regard must be paid to the overall policies of the Government, and provision for considering the opinions and objections of the public, through public hearings, is made in the Act.

Thus the goals and policies of Government and people form the basis for guiding and coordinating public and private activities aimed at development.

In Puerto Rico, as in other developing countries, programmes compete for limited resources. Planning has the task of allocating the available resources on the basis of a good system of priorities. The Planning Board in coordinating the separate and perhaps conflicting programmes of both public and private agencies, ensures optimum use of resources and helps to prevent overlapping and the consequent waste of resources.

Integrated Planning is essential in a country of limited resources. And especially in small countries undergoing a development process, planning is necessary in order to make the most out of the available resources with the greatest possible thrift and efficiency.

Master Plan preparation by the very nature of its processes of coordination and constant review and adjustment, achieves this objective. And the very act of translating the different programmes into physical terms and presenting them in mapped form must help to clarify the interrelationships between programmes.
The Master Plan is prepared by the Planning Board in collaboration with other government agencies and private agencies. The benefit of this constant consultation and review is evident and must result in programmes which are technically sounder, more internally consistent and better related to the total process. It must surely be agreed that "planning pays, not only in better results, but in more economical projects."  

Social and Economic Planning

Master Plan preparation can be regarded as the total process. This process can be broken down into its parts and examined to determine how the different facets are related to the whole.

In Puerto Rico social and economic planning have been closely interrelated. The relationship starts at the very beginning of the process with the formulation of goals.

"The (development) program comprises essential economic means to the achievement of the social objective of raising the levels of living of the people . . . "

This implies that while the development programme has specific economic ends which are important and consistent in themselves, "the fundamental goal . . . is eminently social." 

The expression of goals in these general terms is not sufficient however, and one of the first tasks of planning in Puerto Rico was "to reduce indefinite objectives to tangible and definite targets so that they might come into reality." 

This was first achieved in 1950, when the Economics Division of the Planning Board prepared the first Economic
Report to the Governor. In this report quantitative targets for production, investment, employment and income were projected, based on a model of full employment during the decade of the 1960's. The analysis of this model led to a system of priorities for government activities.

This was a critical step in the development process. However, one criticism made of the report was that "the priorities were designed largely to accelerate the economic development of Puerto Rico and did not automatically present the claims which might be made for rapid social development."30

This shortcoming seems to have persisted until about 1958. It should be noted, however, that although social planning was not formalized the social nature of the objectives of the development programme was constantly kept in mind. Such programmes as the re-settlement of squatters' families, (40,000 between 1940-59), rural and urban housing (6,000 and 26,000 low-cost units respectively), and public health and welfare (about 5.6 per cent of all appropriations between 1944 and 1960), testify to the accent on social development.

It is perhaps a credit to the spirit of planning in Puerto Rico that this shortcoming was recognised and a positive attempt made to remedy the situation. Studies are underway to determine the social implications of various programmes, and suitable modification and re-orientation of these programmes will be made where necessary.

The establishment of a Division of Social Planning appears to have filled the gap in the planning machinery and the
above criticism will certainly be met.

Physical Planning

Physical planning in the sense of city and town planning is also one of the functions of the Planning Board. This central body is the planning authority for each city and town and other local area.

This produces the link between local physical plans and broader national plans and ensures that local developments accord with the overall goals, policies and standards of the island.

One example of this process in operation is the Master Plan for San Juan which formed the basis for the Regional Plan for the Metropolitan Area of San Juan.31

Master Plans for local areas provide a sound basis for ensuring that all matters affecting local communities will be treated in an integrated fashion and for achieving the orderly growth of these communities.

This degree of coordination between local and national planning and between physical development and economic objectives, has seldom been achieved with such success.

Howell sees this as one of the outstanding features of the planning system of Puerto Rico and comments that

While town planning and regional planning are widely accepted as necessary if development is to proceed smoothly and intelligently, it is not sufficiently recognised that, to be successful, a planning authority must narrow the gulf between physical planning and economic planning and between planning and development.32

This is the essence of the planning process in Puerto Rico.
The most recent refinement in the physical planning function was the establishment of a separate Bureau of Regional Planning (see Chart 4), which is charged with the task of preparing the physical development plans for the three regions into which the island has been divided. This Bureau will also coordinate all specialized programmes of government agencies, and carry out special studies in integrated planning.

What the Planning Board expects of comprehensive regional planning is outlined in the following statement.

The comprehensive regional plan . . . must satisfy several criteria. From the viewpoint of the individual region, the plan must present an internally consistent, feasible and viable set of proposals, fitted to the region's needs and resources. From the viewpoint of the whole, the sum of the regional development patterns must be consistent with the expected growth of the population and the economy as a whole, including the financial capability of the government, while the specialized plans must be consistent with the functional requirements of the sector of the economy to which they relate.33

This is obviously a further step in the direction of bridging the gulf, and will undoubtedly improve the effectiveness of the integrated planning function at all levels.

Fiscal Planning

The responsibilities of the Planning Board in fiscal planning are carried out in the preparation of the Six-Year Financial Program, in accordance with Section 13 of the Act.

The Financial Program contains descriptions of proposed and pending capital improvements and current expenses of the Government, and appropriations for government corporations.
It contains an analysis of revenues and proposes methods of financing. It presents an organized set of closely inter-related recommendations for expenditures. Appropriations are based on available resources and are distributed according to the social need of each public service.

This one document serves many functions - supplies information and guidance on financial matters to the Executive and Legislative Branches of Government, as well as the public; outlines the proposed timing and general estimates of costs of the various works and activities; coordinates past, current and proposed programmes and relates them to the Master Plan.

The appropriations for the first year are worked out more carefully as these form the concrete recommendations to the Legislature for the current fiscal year in the Model Budget.

The Program is revised annually and is projected forward one year at a time. Changes in fiscal policy or in economic conditions can thus be taken into consideration and an up-to-date picture of the financial situation is always at hand. The Planning Board thus performs a 'pulse-taking' function for the island's economy.

The financial program is not merely a statement in monetary terms. It also presents an analysis of the most important operating programs and projects, by reviewing achievements to date, re-stating the ultimate targets and indicating what action is intended for the current program period, and the appropriate financial allocations.

Two examples from the 14th Six-Year Financial Program
serve to illustrate this point:

Recommended appropriations under the Health program for hospital construction are preceded by an analysis showing in quantitative terms the required number of beds in different types of hospitals, the existing number and hence, the additional required.

In the Housing Program an analysis is also made of the total required number of units, the achievement to date and the additional number needed to meet the targets set.

These analyses provide an easy means of studying the current appropriations and the proposed action and relating these to the overall picture.

It is significant that the targets are expressed in quantitative and physical terms. To make this possible and meaningful, standards and specifications for the services had to be worked out and fixed beforehand. Whatever the standards set, the device obviously forces decisions on different aspects of the programmes - content, scope, location, adequacy - and reduces vague goals and large-scale financial allocations to understandable targets. It also provides a ready method for measuring progress towards ultimate goals.

The following comment is a fitting conclusion to this evaluation of the fiscal planning function of the Board.

"The Financial Program is an instrument of incalculable value for bringing to physical planning that element of economic realism without which any plan, no matter how brilliantly conceived, is only a plan on paper."34
Summary

This appraisal can perhaps be best summarised by an illustration of the application of comprehensive regional planning. The planning process will be traced through the stage of broad policy statement to the actual location of activities, and it will be seen how successful development can be achieved through integrated planning. The operation of the foregoing techniques and others not previously discussed in detail will also be illustrated through this discussion.

Assuming that the broad goals have been set by the policy statement of the Government, and that based on the interpretation of these goals specific targets have been arrived at, the alternative means to achieve the goals can then be worked out. The Planning Board is instrumental in reducing the goals to meaningful targets and in charting the different strategies.

The next stage which will be the task of the Bureau of Economics and Statistics is to make regional breakdowns of the national projections. This is considered the starting point of regional planning -- "the projection of regional economic growth and the size and geographic distribution of regional populations . . . ."35

In making these projections consideration is given to any special factor or desired policy. For instance, natural economic growth tends toward the concentration of industry and population, particularly in the San Juan Metropolitan Area. On the other hand, government policies are directed at decentralization, and provide special incentives to industries to
locate outside the San Juan Area. The regional projections must achieve a balance between these conflicting considerations, and any desired pattern of settlement or spatial distribution of activities can be planned at this stage.

Once the volume of employment and productivity has been projected, the regional pattern of the labour force and population can be determined on the assumption that people follow jobs; and by applying suitable standards, such as employee/floor area ratio and occupancy standards for housing the actual quantities of these facilities can be worked out. At this stage the integration of the economic and physical elements of development is achieved. Social considerations can also be built into the standards applied in the decisions on facilities.

The required physical facilities are, then, placed into a Programme of Capital Works. The provision of public utilities is based on the needs of industry; and adequate public services and community facilities must be provided for the people. The location of these works can guide development into desired areas and into pre-determined patterns. The extent and quality of the new facilities will be influenced by the industrial development objectives and their distribution will be determined by settlement policies. "Puerto Rico experience . . . indicates that provision of such things as roads, housing and schools, as well as commercial facilities and services, is an important factor . . ." in industrial location. Hence the value of the Programme of Capital Works as a tool is achieving the desired type and pattern of development.
It is obvious that the Programme of Capital Works and the allocations for government expenditure can be carefully worked out and coordinated at this stage for internal consistency and for conformity with the overall Master Plan.

So far the techniques employed have been analytic, directive and coordinative. At this point, the regulatory devices enter the planning process. These are the functions of the Bureaux of Urban Development, Project Review and Permits (See Figure 7.)

Urban Planning, under the Bureau of Urban Development, is a device for guiding the growth of urban areas. Private and public activities in these areas are regulated by the establishment and enforcement of rules and regulations to govern the development of urban areas -- land subdivision, zoning, official maps of streets, and roadside signs and billboard regulations.

The Planning Board reviews all capital works projects submitted by Insular Government agencies and municipalities. It assures that projects are properly located and that there are no conflicts between various programmes. Projects in both urban and rural areas are checked to see that they fit the anticipated development and satisfy the goals of the Master Plan.

By requiring private developers to obtain use permits and construction certification, the Planning Board exercises effective control over private projects.

After projects have been executed, the last stage of the planning process goes into operation. This is the work of the recently created Social Planning Division. This Division
evaluates the programmes in an attempt "to clarify the kinds of goals or values of human beings and the impact of government planning and action on them." This is the means whereby those responsible for the planning of development and, ultimately the decision-makers, can determine how successful the planning has been and to what extent the expected and desired goals are being achieved.

The axiom "planning is a continuing function" has been firmly established in the theory of planning. In Puerto Rico it has also been established in practice. As shown in Figure 4 -- the Planning Process -- evaluation, at the last stage, leads back to the first and the process starts all over again. This is familiarly known as "feed-back" and truly underscores the continuing nature of planning.
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CHAPTER V

ORGANIZATION FOR PLANNING FOR DEVELOPMENT IN TRINIDAD AND TOBAGO

The concept of planning as a function of Central Government is generally accepted in Trinidad and Tobago and the planning process is formally carried on within the organization. Present arrangements are, however, unsatisfactory and do not perform with maximum effectiveness.

It is intended, therefore, in this chapter to present and discuss an organization for planning for development which will meet fully the requirements of the planning function in the light of the development problems and needs discussed in Chapter II, and based on the lessons learnt from the Puerto Rican experience.

Obviously this proposal will not be completely or radically original. The circumstances in Trinidad and Tobago do not demand such drastic treatment, and, furthermore, to the extent that any new agency for planning will be built upon the existing foundation and must be fitted into the general structure of Government, the general outlines of such an agency are already set. What is needed is an elaboration and a refinement of the planning function.

The conditioning factors are: (1) the existing structure and organization of Government, especially the Executive Branch which operates within a fairly well-defined and long established
pattern; (2) the existing Economic Planning Division which, to a limited extent, performs its task competently; (3) the recently enacted Town and Country Planning Ordinance, 1960, which provides the framework for physical planning in Trinidad and Tobago.

In Trinidad and Tobago it will be recalled from the analysis in Chapter III that the planning process is fragmented, in that a number of separate agencies, some quite independent of Government, conduct different aspects of the planning function; it is ineffective in parts, and other parts are not applied at all. The logical conclusion was drawn that the Government in Trinidad and Tobago needed a central planning agency to co-ordinate, direct and control activities carried on by all agencies and individuals, public or private, which impinge on the development process. The organization herein proposed, which will be called the Central Planning Department, is designed to perform all the above functions in respect of planning for development by Central Government in Trinidad and Tobago, and without disrupting unduly the existing structure of government.

**Jurisdiction of the Central Planning Department**

The success of planning is largely determined by the comprehensiveness of the process and the extent of its jurisdiction over the activities of the public and private sectors of the community. The nature and scope built into the planning function are related to the degree of Government participation in the
development process, and the amount of Government intervention in private activities. The responsibility of Government in the public sector is clearly established. But it is not equally easy to prescribe the desirable extent of Government intervention in private economic enterprise.

The following comments by Rexford Tugwell presents the case for some degree of Government responsibility for the activities of the private sector.

Their expansion or decline, their public policies, the kind of services they provide, the wages they pay, and the condition of work they offer can no longer be matters of public indifference. They are relied on in ordinary circumstances for production and employment. If they fail, even partially, the government will be involved in the failure. Unemployment involves loss of income; loss of income results in deprivations the state is bound to relieve in some way.¹

Tugwell goes on to argue that while there is not universal acceptance of this principle of public responsibility, it is now generally agreed that the support of government may be necessary at strategic points, for sagging sectors of the economy. Furthermore, there is little objection to the principle of social services; the argument is mostly about their desirable extent.²

It may be added that in the case of a developing country like Trinidad and Tobago, where the needs are so much greater, the resources so much less, and the responsibility of government for general welfare is proportionately heavier, the argument for government participation is even more conclusive.

Tugwell concludes thus:

So the central planning agency for the government is involved to a certain degree in the direction of private enterprise -- the degree depending on the acceptance of responsibility for general welfare. It may very well, in
what we are learning to call a mixed economy, need to inquire in some detail into the intentions of enterprisers and enter them on its balance sheet for the future.3

The precise nature and extent of government intervention, through the co-ordinating and directing activities of the Central Planning Department, must obviously be defined within the specific context of Government in Trinidad and Tobago and in accordance with the special conditions of the country. It is clear, however, that any activity which makes demands on resources, which can influence other activities, and which affects the general welfare of the community, falls within the area of concern of Government, through this co-ordinating and directing agency.

Jurisdiction of the Central Planning Department over two other sets of agencies concerned with the development process must be established. These are the Executive Departments of Government which are responsible for the implementation of development programmes as well as the day to day operations of government, and the Statutory Agencies, which are charged with responsibility for specific functions (industrial promotion, tourism, public utilities).

The executive departments are in a specially strategic position to initiate programmes within their area of competence, and to present their proposals to the Planning Department. Such departments as the education department, the health department, the port services department, all have specialized needs, and are definitely the most competent authorities to make proposals for development within their own spheres of operation. However,
they all provide services and facilities which are the ultimate responsibility of Government. Their activities must, therefore, be co-ordinated within the stated policy framework, and consequently fall within the jurisdiction of the Central Planning Department.

The same principle applies to the activities of the Statutory Agencies. The practice of delegating responsibility for certain specific functions to such agencies is widely accepted as a useful device for carrying out certain aspects of Government policy, and carries definite advantages. The most obvious advantage of statutory agencies is that their activities are not subject to the whole complex of regulations and red-tape normally associated with regular governmental functions. The statutory agency is therefore more flexible and better able to adapt easily and quickly to all circumstances. It is also able to compete for qualified staff and bring to bear the necessary expertise on a variety of matters for which the regular Government organization is not equipped. These are valuable features for the circumstances of Trinidad and Tobago where an extensive development programme is now in operation, and many new, complex and specialized functions have to be planned and executed.

The fact that these functions are delegated does not exonerate Government from its responsibility for guaranteeing their proper execution, especially when essential public utilities, necessary for the adequate and efficient functioning of the community, are involved. The extent of this responsibility is further established in the case of functions which influence
other activities or which have an impact on the course of the development programme.

To the extent, therefore, that Government is ultimately responsible for the successful operation of these statutory agencies, the Central Planning also has jurisdiction over their activities. These must be co-ordinated with all other development activities, and must be made compatible with the overall policy on development. The functional relationship between the Central Planning Department and the Statutory Agencies must permit the transmittal of policy statements and general directives down to the agencies, and must provide for the scrutiny, co-ordination and final approval of their plans and programmes by the Central Planning Department. These arrangements are similar to those operating in Puerto Rico.

The following comment sums up concisely the jurisdiction envisaged for the Central Planning Department and its relationships with other agencies, public and private, engaged in the development process.

The (planning) agency, looking toward the future, and having the purpose of enhancing the wellbeing of the whole, cannot exempt itself from interest in, and from giving advice about, any social activity of importance which makes demands on the labor force, the technical skills, or the natural resources of the society, or which has the power to increase or diminish social wellbeing.4

The Planning Process

Figure 8 presents in graphic form the proposed planning process as it will be applied to the development process in Trinidad and Tobago. As the chart indicates the process will be
TRINIDAD AND TOBAGO
PROPOSED PLANNING PROCESS

STAGE 1
POLICY
POLICIES GOALS OBJECTIVES

STAGE 2
SURVEY - ANALYSIS
RESEARCH ANALYSIS TARGETS
INVESTIGATIONS SOCIO-ECONOMIC PROJECTIONS STRATEGIES
SURVEY DEVELOPMENT PROSPECTS

STAGE 3
DESIGN
GENERAL DEVELOPMENT PLAN
REGIONAL LOCAL AND SPECIAL AREAS
PHYSICAL DEVELOPMENT PLANS

STAGE 4
CONTROL OF DEVELOPMENT
CAPITAL WORK PROGRAMME PRIVATE PROJECTS REVIEW
PUBLIC PROJECTS REVIEW ZONING
FIVE YEAR FINANCIAL PLAN CONSTRUCTION PERMITS
PROGRESS REPORTS BUILDINGS CONTROL

STAGE 5
EVALUATION
PROGRAMME EVALUATION
SOCIAL PLANNING
OBJECTIVES AND STANDARDS
broken down into five stages - (1) Policy, (2) Survey and Analysis, (3) Design, (4) Control of Development and Implementation, (5) Evaluation. Stage (5) "feeds back" to stage (1). For clarity and for analytical purposes it is necessary to present the planning process in separate stages and in some general order. But it should be noted that while this order will be followed generally, the functions performed at each stage are not entirely independent and there will be a considerable amount of interplay and overlap between the stages, especially between stages (2), (3) and (5). This interplay is important and forms an essential part of the informal structure of any continuing operation.

Stage (1) - Policy

Stage (1) - the policy stage - will be the responsibility of the Cabinet and Legislature. At this level, goals and objectives for the development of the country will be formulated and an overall policy evolved for achieving these goals and objectives.

Stage (2) - Survey and Analysis

Ideally, responsibility for the next four stages should reside in one central organization, closely tied to the Cabinet. The requirements of stage (2) call for a complete, detailed survey of the country, socio-economic projections for the country as a whole and for viable regions, and adjustment of claims and a reduction of vague policies and expectations into concrete terms,
the development of standards, and finally the charting of alternative strategies.

Stage (3) - Design

At stage (3) - the stage of integrated planning - the data from the previous stage are translated into physical targets and presented in a Plan for Overall Physical Development. This instrument corresponds to the Master Plan prepared by the Planning Board in Puerto Rico. It will comprise plans for different aspects of development, with supporting tables, charts and other descriptive data from stage (2). The Plan of Overall Physical Development will naturally reflect the policies of Government and the goals of development. In the course of preparing this document these goals will be brought into sharper focus and the resultant needs and consequences of alternative strategies highlighted.

This is the stage at which realism and feasibility in terms of physical resource potential, rather than financial capability, are built into the development effort. The programmes arising out of alternative strategies can be tested against available resources to determine what is possible of achievement and where critical deficiencies lie. Clearly there must be close co-ordination of the functions at stages (2) and (3), and constant review and adjustment to ensure that the programmes are rational, consistent with policy and acceptable to Cabinet and Government.

Stage (4) - Control of Development and Implementation

To be completely successful the planning process must
carry through to implementation of programmes. In order to ensure that executive actions conform to the planned programmes, devices must be developed for controlling and directing these implementing activities. This phase of the planning process will be conducted at stage (4). There are two aspects to the control phase - direction of public activities and the control of private activities.

Development activities are directed to the achievement of specific goals in the overall interest of the entire society. It is by no means axiomatic that separate efforts based on individual initiative, whether by individuals in their own interests or through public agencies pursuing specialized communal objectives, will combine to produce "the public interest." All these efforts must be channelled toward overall goals and objectives and must, therefore conform to some guiding policy. Hence the absolute need for rules, regulations, directives and other controlling devices.

However, controls as such have little value - at best they merely prevent the undesired from happening, they do not ensure that what is desired will take place. Thus controlling devices must be related to the programmes which are desired to be achieved. For instance, a zoning regulation intended to prevent development from occurring where it is not wanted will be ineffective without a plan to indicate where different kinds of development should occur. In other words, there can be no control of development without planning for development. It is specially important that this principle be recognized in
Trinidad and Tobago where the new Ordinance provides for both functions. Especially in the early years, control might take precedence over planning. For this reason it is proposed that the stage at which controls will be developed and applied logically should follow the design stage.

Implementation although not specifically part of the planning process is closely associated with the control stage, since the planning agency has the responsibility of seeing that the operative programmes are not in conflict and do not overlap. The planners must also ensure that specific programmes complement each other, that is, staging must be so geared that completion of different phases of programmes interlock. Moreover, actual implementation of plans is the ultimate test of the purely planning phases of the process.

Stage (5) - Evaluation

The final stage of the planning process - evaluation - will complete the cycle. This function will not be conducted in a water-tight compartment. There will be a constant exchange between this stage and the other stages of the process, and, in particular, there should be a regular feedback between stage (5) and stage (2). The kind of evaluation envisaged is the appraising of programmes and the assessment of their results to see whether the desired objectives are being met, and whether the anticipated effects are being produced. In the final analysis, all development has social significance in terms of housing, health and sanitary conditions, education and general well being,
and ultimate justification of development should be in these terms. It is suggested, therefore, that this final evaluation should be related to social policies and objectives and should be concerned with the social impact of development.

Evaluation in concrete economic and physical terms is a relatively straightforward matter, and will be carried out as part of the functions at stages (2) and (3). However, 'social' evaluation of the relationship between social objectives and the results achieved, of the related costs and benefits, and of the ultimate effects of social policies, is a more complex and specialized function. For this reason it deserves separate status in the planning process.

At this stage the testing of programmes for consistency with social objectives will be carried out. For this purpose, desirable social criteria must be decided upon. These will also apply when detailed programmes are worked out and put into effect, to determine the efficacy of the programmes from a social point of view. In this manner, the valuable influence of the social planner will be brought to bear on the development process in all its phases, and many of the social costs of development, which are now ignored, will be anticipated and planned for.

Financial Planning

One function - that of financial planning - which it is proposed to include in stage (4) needs special note. In contrast to Puerto Rico where the Division of Finance of the Planning Board is responsible for all aspects of the Financial Programme including capital improvements, current expenses, proposals for
financing etc., the financial planning function will be divided into three separate phases which will be carried out by different agencies with distinct duties but with close co-ordination.

The three phases are: 1) general fiscal and monetary matters, 2) financial matters related to development, and 3) financial programming of capital works.

Fiscal and monetary matters and budgeting are included under the portfolio of the Minister of Finance. This Ministry is also responsible for developing financial policy under the guidance of Cabinet.

Government financial policies play an important part in the general economic policy of Trinidad and Tobago. The anticipated or desired level of government expenditure is largely dependent on the general level of economic activity, and the projected volume of government expenditure must be correlated with projected demands for public services by future population. Consequently financial matters which are specifically related to development will be dealt with by the Division of Socio-Economic Planning at Stage (2) of planning process.

Detailed financial programming of capital works will be carried out at stage (4) of the Planning Process. This aspect of financial planning will emphasize the preparation of a Financial Programme of major public works to be carried out by Government over a specified period of years. At present the Five-Year Development Programme closely approximates the document proposed. The proposal envisages a continuing programme with one year being progressively added to the programme as is done at present in Puerto Rico.
Finally, the proposed modifications are necessary in order to incorporate smoothly the new financial function with the existing structure. It also seems desirable to separate purely fiscal functions from financial matters related specifically to development. Concentrating the latter in the planning organization provides the planning function with the more operative aspects of fiscal policy, and attaches the third dimension, volume, to development plans.

Organization of Central Planning Department

Figure 9 presents in graphic form the proposed organization for planning for development in Trinidad and Tobago, covering stages (2) - (5).

The first general point to be noted is that, at least in the first stages, the planning function will not be all conducted within the same agency. With the object of making this proposal as practical and as meaningful as possible, it is intended to graft the new organization on to the existing structure of government, expanding existing departments and agencies wherever possible to accommodate new functions in the planning process and incorporating existing agencies or sections of departments into the new planning framework. In this manner, it is hoped that the planning function as introduced will operate most effectively and with minimum disruption to the ongoing functions of Government.

Initially, the functions in stages (2), (3) and (5) will all be conducted within one unit - The Central Planning Department. There will be three Divisions - (1) Socio-Economic Planning, (2) Integrated Planning, and (3) Social Planning.
TRINIDAD AND TOBAGO
PROPOSED CENTRAL PLANNING DEPARTMENT
ORGANIZATION CHART

DIVISION OF SOCIO-ECONOMIC PLANNING
Research Investigations
Survey Analysis Projections

DIVISION OF INTEGRATED PLANNING
Physical Development Plans

REGIONAL AND LOCAL PLANNING
New Urban Development
Regions Local Areas
Special Development Areas
Land Use

HOUSING AND URBAN-REDEVELOPMENT
Housing Development
Urban Re-development
Slum Clearance

DIVISION OF PLANNING CONTROL

PUBLIC ACTIVITIES
Capital Works Programme
Five Year Financial Plan
Public Projects Review
Inspection and Progress

PRIVATE ACTIVITIES
Private Projects Review
Zoning
Construction Permits
Building Control

DIVISION OF SOCIAL PLANNING
Evaluation
Social Objectives and Standards
Socio-Economic Planning Division

The duties to be performed within these divisions are indicated in the organizational chart. The core functions of the planning process will be those associated with the survey and analysis stage and will be the responsibility of the Socio-Economic Planning Division. As stated previously, the duties of this division will be to translate policy decisions into operative terms, to adjust competing claims on resources by public and private agencies, and to chart feasible and desirable strategies for development both in public areas of investment and in the private economic sector, all based on suitable and adequate standards. A necessary prerequisite to the proper execution of these duties is a complete survey of all relevant data as the starting point for any planning process.

The Government's Central Statistical Office has made a creditable start on collecting data on a variety of subjects relevant to the problems of development. However, significant gaps exist in the available data, some of a technical nature such as a soil survey and a geological survey, others more closely associated with physical planning, such as a land-use survey and a comprehensive housing survey.

The Socio-Economic Planning Division must therefore give high priority to designing and directing the necessary surveys. The analysis of this basic information will form the basis for projections. It is proposed that the scope of these analyses and projections be territorial, that is, for the whole territory of Trinidad and Tobago, as well as for regions. Such regional
projections will form the basis for regional development proposals.

The case for a policy framework for regional development has already been argued. The value of such a policy is endorsed by the experience in Puerto Rico where the need for a regional framework was recently recognized.

The advantages of adopting a regional framework at the very highest level of the planning process are seen to be many. This framework will provide a controlling device for all other stages of the process. It also provides a convenient mechanism for achieving the desired policy of "balanced" development. By focusing detailed attention on separate regions, the regional disproportions to which development programmes are subject can be more easily resolved. Regional needs and aspirations can also be reconciled with overall policies at this stage.

The Socio-Economic Planning Division will be most closely associated with the chief source of decision-making in Central Government - the Cabinet. It will, in fact, become the "intelligence agent" of Government. Besides doing research, analysis and projections on socio-economic aspects of development, this Division will perform a "pulse-taking" function for Government - constantly reviewing special problems, following trends and anticipating trouble-spots.

This "pulse-taking" function will be akin to the evaluation and "feed-back" function outlined in stage (5) of the planning process. It will, however, be directed more to the problems which may alter the direction of the programme or produce other major changes. Thus, the Socio-Economic Division
will follow trends in the economy, analyze the circumstances surrounding any extraordinary situation, such as the discovery of a new resource, resolve unanticipated conflicts in the programme, and be available to advise Government on the actions needed to meet new conditions.

It will also test reactions to general policies and assist decision-makers in altering policies and developing new policies to meet changing conditions. If this function is well developed, it will provide Government with a vital tool for keeping policy abreast or ahead of current conditions in the country.

**Division of Integrated Planning**

The duties of the Division of Integrated Planning will be the preparation of the Development Plans. These plans will be prepared on three levels - each being progressively more detailed than the previous one. Firstly, the General Development Plan will be a translation of the long-range broad policies and goals developed at stage (2) into physical terms. This plan will look far into the future (25 years perhaps) and the proposals will necessarily be very general. However, it will indicate the thoughts of Government and Planning Department on the character of the total community environment which is desired in the future. This view of the future is important to provide the controlling unity of purpose to the development process. The General Development Plan will not be an official document, but will be reserved for use of the Planning Department in charting future strategy for development.
At the next level the medium-range objectives and targets will be embodied in a Physical Development Plan. This instrument corresponds to the Master Plan in Puerto Rico, and is the same document provided for in the Town and Country Planning Ordinance (Part II Section 5). This will therefore be an official document approved by the Legislature and available to Government agencies and departments as well as to the general public.

This is a detailed statement of policy for development for the mandatory period of five years. Thus it provides a guide to public agencies in the preparation of specialized programmes and it forms the basis of control and regulation of private agencies and individuals. Provision is also made in the Ordinance for "areas of comprehensive development." The designation of these areas, which must fit into the pattern of integrated development, will be the responsibility of this Division.

Regional requirements will also be worked out by this Division, and the Regional Physical Development Plans will reflect whatever regional policy is decided upon. By preparing all these plans within the same Division, the Planning Department will produce plans that are internally consistent and at the same time conform to the overall policy.

Stage (5) - evaluation - will be the responsibility of the Division of Social Planning. This Division must be closely integrated functionally with the Divisions of Socio-Economic Planning and Integrated (Physical) Planning. It is therefore included within the same department. This juxta-positioning of the three divisions is the organizational manifestation of the
concept of integrated or comprehensive planning for development. The function of the Social Planning Division have been discussed in the section dealing with the planning process.

A few brief notes are necessary to complete the organization before finally indicating how the proposed organization for planning will be grafted onto the existing structure.

Directly under the Division of Integrated Planning will be two Sub-Divisions which will have specific functions of a more local nature. These functions are:—urban development and redevelopment, housing, planning for regional, local areas and special areas, and land-use.

Housing and urban redevelopment are placed together because (1) they are complementary functions; (2) although related to planning they possess many executive aspects; and (3) the magnitude of these problems in Trinidad and Tobago and the complex and varied solutions needed to deal with them seem to demand separate treatment. The duties of this section are envisaged as ranging from negotiations with contractors on mass housing to design and layout of small aided self-help schemes and layout of redevelopment areas.

The remaining functions enumerated above will be carried on by a Sub-Division of Regional and Local Planning. This section will deal with the more detailed aspects of physical planning, such as the preparation of plans for new urban development, plans for local or special areas, the detailing of regional plans especially those relating to urban areas, and land-use in connection with all the above plans.
The close relation between the three main functions above and these Sub-Divisions provides the bridge between the territorial level of general planning and the regional and local levels of detailed planning.

The two remaining divisions in the planning organization are: Public Works and Control of Development. The duties of the Division of Public Works are self-explanatory - the programming of public works included in the Physical Development Plan, which will include staging, detailed checking and reporting on progress of works, and the preparation of the Five-Year Development Financial Plan. This Division will also be responsible for the important function of acquisition of land for public works projects.

Control of Development is the major aspect of the Control Stage in the Planning Process. Here both public and private activities will be controlled - public, by review of capital works projects; private, by review of specific projects such as housing layouts and major sub-divisions, by zoning and other regulations, and through construction permits.

This Division will handle all applications for permission to develop and will administer the section of the Ordinance dealing with the control of buildings and other structures, advertisements, and zoning regulations.
Incorporating the New Planning Organization
Into Existing Governmental Structure

An important aspect of this proposal is to suggest a method of incorporating the new planning organization into the existing Governmental structure. It has already been indicated that the proposal does not envisage the establishment of a complete Central Planning Department from the start. The attempt to graft the new planning organization on to the existing structure is made for reasons of speed in the introduction of the planning function, effectiveness in the initial stages of its operation, and economy in staffing and servicing the planning department.

Comprehensive planning is urgently needed in Trinidad and Tobago, where conscious steps have been taken by the Central Government to develop the country. It is possible that unless effective planning is introduced promptly, many of the undesirable effects and the costly mistakes of development will result.

Obviously, it would be undesirable to interrupt or delay the development process which has already started. In order to avoid this, the new planning organization must begin to work effectively from the very start. In the process of introducing the new organization it should be possible to continue whatever planning activities are needed for the control and direction of the development programme.

A planning department to carry out all the functions in the planning process outlined earlier would require a large, highly specialized staff. Moreso, if the specialized, technical
functions such as housing and public works, were handed over to the planning department. The experience of Puerto Rico is relevant here. The total staff of the Puerto Rico Planning Board in all categories is about 500. Proportionately, Trinidad and Tobago which is half the size of Puerto Rico (in area) would require about 250 persons for a full-fledged planning department. This would include a large number of persons with a variety of technical and professional skills, and it is reasonable to assume that recruiting and training the necessary personnel would take many years. In the meantime planning must continue.

With these considerations in mind, it was decided that the most practical proposal and the one most likely to fit the conditions is an organization which can be incorporated into the existing structure as quickly as possible, with a minimum of disruption and still satisfy the planning needs of the country.

Eventually, as the planning function matures, as planning activities gain a certain measure of stability and effectiveness and as competent staffs are built up, it will be possible to complete the central planning department and to integrate all the planning functions into an "ideal" organization.

We shall now examine in detail the method of introducing and incorporating the new planning organization into the existing structure, first, by creating new Divisions where necessary, next, by expanding existing departments to cope with the new functions where possible, and finally, by establishing the relationships between the parts of the new organization and the existing.

New Divisions of Integrated Planning and Social Planning
must be created. Together with the Economic Planning Division, which can be expanded into the proposed Socio-Economic Planning Division, these will form the core of the Central Planning Department. The position of the Central Planning Department in the Governmental structure is indicated on Figure 10. At the head of this Department will be a Director who will be directly responsible to the Premier. The Central Planning Department thus stands in relation to the Premier, as other Executive Departments stand to other Ministers.

However, making planning the responsibility of the Premier - the senior Minister of Government - gives it the necessary power and authority. The Planning Department will constantly be involved in resolving conflicts and deciding between competing claims by Ministers; inevitably also, it will become involved in the entire decision-making process. Thus it is necessary to place it above Ministerial influences and to protect it from undesirable or unnecessary pressures.

The Housing Department which falls under the control of the Minister of Housing and Local Government can be expanded to perform all the duties associated with housing and urban development. There appears to be two reasons which make this arrangement desirable, at least in the early years. First of all, housing is and will continue to be a critical and major function in Trinidad and Tobago. The demand for housing will run far in excess of the supply and Government, through the Housing Department, will be involved in the purely administrative and executive aspects of the problem. It is thought unnecessary and undesirable
TRINIDAD AND TOBAGO
GOVERNMENTAL STRUCTURE
SHOWING RELATIONSHIPS OF
CENTRAL PLANNING DEPARTMENT

CABINET

HOME AFFAIRS
AGRICULTURE LANDS FISHERIES
COMMUNICATIONS WORKS UTILITIES
EDUCATION CULTURE
FINANCE PLANNING DEVELOPMENT
HEALTH WATER SANITATION
WORKS DEPARTMENT
CENTRAL PLANNING DEPARTMENT
HOUSING DEPARTMENT

MINISTERS

PREMIER

LABOUR SOCIAL SERVICES
INDUSTRY COMMERCE TOURISM

LOCAL GOVERNMENT
PORT-OF-SPAH CITY COUNCIL
SAN FERNANDO BOROUGH COUNCIL
ARIMA BOROUGH COUNCIL
COUNTY COUNCILS

STATUTORY AGENCIES
INDUSTRIAL DEVELOPMENT CORPORATION
ELECTRICITY COMMISSION
CENTRAL WATER DISTRIBUTION AUTHORITY
TOURIST BOARD
to saddle the Planning Department with these activities. However, and this leads to the second reason, the formulation of a housing policy and the planning of housing (needs, location of mass housing etc.) can be the responsibility of the Planning Department. By separating the responsibilities for planning and implementation of this major function, it is felt that greater efficiency in both aspects will be achieved.

The functions of Regional and Local Planning is completely new and is included as a sub-division of the Division of Integrated Planning. The activities associated with the function of Regional and Local planning are essentially dispersed, but linking them intimately with this Division provides the co-ordination between the broader plans and plans for specific areas. It is at this point that the impact of local intentions can be made. General directives and proper orientation can be given to Regional and Local Planning Activities by the Central Planning Department, but it is an advantage to have some means of giving expression to local aspirations and proposals. For this reason it is suggested that the bulk of the work in this sphere be done in the regions and local areas concerned. A suitable framework for carrying out activities in regions and local areas is suggested in the next section of this chapter.

The Works Department of the Government of Trinidad and Tobago falls under the Minister of Communications and Works. The duties of this Department at present include planning, programming and execution of public works for all Ministries of Government. It is therefore, the only department which commands the necessary
competence and expertise to perform the functions under the two Divisions of Public Works and Control of Development. Public works require mainly engineering expertise, while control of development may require planning, architectural and engineering skills.

It is proposed, therefore, in the first instance to create a special section within the Works Department, expanded where necessary, and able to draw on the resources of this Department, to carry out the functions of these two Divisions. Ultimately, when the section has developed and the planning function has matured, these two Divisions can be incorporated into the Central Planning Department.

Incorporation of the separated functions can be easily effected when circumstances permit by transferring the functions to the Central Planning Department, suitably expanded.

It is felt that these proposals will create a planning organization which will carry on the planning function adequately and effectively in the initial stages, and will ultimately evolve into a Central Planning Department of full status with a complete range of planning activities in one closely integrated unit.

**Regional Framework**

To conclude this discussion on the organization for planning for development in Trinidad and Tobago, a further elaboration will be made on the concept of a regional framework for development.
Assuming that a policy of overall regional development has been decided upon and the Planning Department has defined the planning regions, which may or may not coincide with existing administrative divisions, the problem remains of finding an acceptable method of carrying out detailed planning and implementation in respect of these regions.

The relationship between Central Government and Local Government and their relative roles in the development effort have already been pointed out. In view of this relationship the Planning Department within Central Government will have the power to conduct the necessary planning studies and analyses for the regions and local areas. However, at the stage of design it is desirable to have local expression of opinion and aspirations on matters affecting local areas.

The Town and Country Planning Ordinance provides for the Minister to confer with Local Authorities on matters affecting land with their areas, when a development plan is being prepared. This provision does not cover a regional arrangement, and may often result in a multiplicity of conflicting local interests, especially since the proposal envisages development plans of a regional rather than a more local nature.

The solution proposes the appointment of a Regional Planning Officer for each region whose duty it will be to consult all parties concerned with the region, whether they be officials of Government Ministries and agencies, Local Authorities, or private agencies and individuals, and through this process of consultation and discussion introduce that element of effective local participation which is necessary for the
success of any plan.

In addition, the Regional Planning Officer will be the official co-ordinator of Government activities in his region. In this way the operations of all executive departments will constantly be subject to the scrutiny and direction of the Planning Department through the Regional Planning Officer. Many departments of Government now carry out their operations on a regional or partly regional basis. The boundaries of present areas of administration and implementation may not coincide exactly, and may not agree with the regions designated for planning purposes. However, in many cases it may merely require minor adjustments to bring boundaries into agreement with each other and with the planning regions adopted by the Planning Department.

In any case, it may not necessarily be required that areas for executive action and implementation of plans be identical with planning regions. These areas may remain as present and satisfy the needs of administrative convenience, provided all activities are properly co-ordinated and adhere to the Regional Development Plan.

To sum up: the planning function will be so organized that the control and direction of development activities will be effectuated at the regional level, through a Regional Planning Officer. This officer will be the official co-ordinator of Government activities at this level.

The Regional Planning Officer is thus a key-position in the planning structure. Information flows in two directions
through this point. Plans, directives, regulations are passed down from the top for execution and implementation at lower levels; and requests, suggestions and data flow from the bottom up to the central source of planning function. The Regional Planning Officer will interpret broad policies for local consumption, and sift and collect local material for transmission to the higher level of the planning structure.

While allowing relative freedom of local initiative and action, this arrangement safeguards overall policy by retaining central co-ordination. An effective bridge is made of the gap between the two levels, and the foundation is laid for building up a powerful structure as the planning function matures.
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2 Ibid.

3 Ibid, p. 70-71.


CHAPTER VI

SUMMARY AND CONCLUSIONS

The major purpose of this study was to demonstrate the hypothesis that planning for development as a function of central government in developing countries must be comprehensive, that is, economic, social and physical planning must be integrated into one total process, if development is to achieve maximum overall benefits, at minimum costs, to the peoples of these countries.

Arising out of the discussion in Chapter I of the planning function in certain developing countries, the conclusion was drawn that current practice of planning for development displays many serious shortcomings. These defects appear as the direct results of the peculiar biases which have been built into the planning function, which in turn have their roots in the theoretical approach to the problem of development and the resultant planning philosophy.

Development, in most developing countries today, is regarded essentially as a problem in economics, which can be solved by careful economic planning and the manipulation of relevant social phenomena. Only rarely are the problems related to the social and physical implications of economic development considered and planned for. Nor is it fully realized that these social and physical factors may in fact be powerful determinants
of the progress and ultimate success of economic development itself.

This lack of functional integration in the approach is the first crack in the theoretical foundation upon which the planning function is built. The second defect appears in the sphere of spatial integration. Planning for development in developing countries tends to be conducted in aggregative terms on a national level. This tendency results in a perpetuation of existing patterns of settlement and development, which are seen to reflect sectoral imbalance, spatial disorganization and extensive social and economic costs. Further, gross national policies are not carefully interpreted in regional or local terms and regional and local initiative and aspirations do not find expression at the national level, with the result that conflicts often arise and the full benefits of development are not adequately distributed.

These arguments point to two requirements. First, there is need for a more elaborate conception of the development process, as a complex phenomenon involving a multiplicity of interdependent changes in all aspects of the life of a society, and having wide ramifications in the economic, social and physical elements of the community, and hence, requiring a comprehensive functional planning approach to deal with it.

And secondly, to be completely successful, development has to affect all the component parts of the community, individually and in relation to the whole, as well as the total entity. This implies that a suitable framework for development has to be
adopted at the highest level which will allow adequate attention to be focused on the lower levels as well. Similarly, the planning function, to be effective, has to operate within a framework which makes it possible to give special attention to specific parts, yet combine them all in a manner which promotes the best interest of the whole.

The discussion of problems affecting current practice of planning for development was, of necessity, brief. However, it indicated the direction in which a solution can be sought, and provided the framework within which the special case of planning for development in Trinidad and Tobago could be studied. The proposals which concluded Chapter I were tentative suggestions as to the sort of planning philosophy needed in developing countries to serve the development process. The elaboration of these ideas and their application in practical circumstances were left to Chapter V.

It should be re-emphasized that the final product of the case study on Trinidad and Tobago was intended to be a proposed organization to perform the function of planning for development within Central Government. Hence, the discussion was oriented towards a consideration of the planning implications of development and the consequent organizational requirements, rather than a presentation of a detailed argument on the problems of development as such.

There remain many unexplored areas in this discussion which can form the subject of further study. However, within the practical limitations of this study, it has been possible to
present a picture of the magnitude of the future needs in Trinidad and Tobago, and consequently, the scope of the development effort required. This led to the statement and discussion of the nature and content of the planning function necessary to deal adequately with the anticipated development effort.

The description and evaluation (Chapter III) of the planning process as far as it is currently applied to development in Trinidad and Tobago revealed that the function falls far short of being effective, and certainly does not approach the type of comprehensive planning function suggested in the discussion in Chapter I.

The planning system in the Commonwealth of Puerto Rico is one of the best examples of the comprehensive approach in operation. The Planning Board in Puerto Rico was established in 1942 and planning has been applied with great success to the development process. As development progressed and the nature and scope of the development process became more clearly established, the planning process has also progressively matured. What has emerged today is a well integrated planning system based on a comprehensive approach which regards all aspects of development as necessary and interrelated factors, that must be combined into one complete whole if the development effort is to be successful and if the desired goals are to be achieved.

The manifestation of this approach is a large-scale planning operation and a well-developed planning organization which covers all functional areas of the development process. Spatial integration is achieved by making the one central
Planning Board responsible for planning at the regional and local levels as well as the national. The Planning Board occupies a position close to the source of decision-making and executive power, that is, the Governor, and thus enjoys the power and authority to make its actions really effective.

The description and appraisal of the planning process and the organization of the Planning Board formed the subject of Chapter IV, since it was felt that valuable lessons could be drawn from this experience, as a model and practical guide for the proposals in Chapter V.

Our proposals in Chapter V, which incorporate some of the proven features of the planning process and the organization for planning in Puerto Rico, try to approach as close as possible to the realities of the circumstances in Trinidad and Tobago, while still adhering to a pure theoretical conception of the manner in which the planning process in central government should function ideally. In order to fit the existing conditions and organizational structure of Central Government in Trinidad and Tobago, certain modifications had to be made in the proposed organization. These seem perfectly acceptable in view of their practical significance and the advantage of effecting a smooth and workable incorporation of the new planning organization into the present structure.

One further point which justifies some of the modifications is related to the question of staffing. Obviously a planning organization such as proposed will require a large and highly trained staff of professionals in planning and related
fields, as well as technicians and administrative personnel. This matter is outside the scope of the present study, but it is recognized as a factor which will influence the scale of planning activities, especially in the early years. The proposal does not call for the establishment of the "ideal" full-fledged Central Planning Department, with fully staffed Divisions, but has suggested how the planning function can be grafted onto the existing Governmental structure and start operations on as extensive a scale as possible with limited manpower resources which are likely to be available.

The proposed organization is designed to perform the function of planning for development by Central Government in Trinidad and Tobago. It meets the requirements of the comprehensive approach to planning, and is both functionally and spatially integrated. The small size of the territory, the stage of development, the kind of economic organization, and the role of Government in the development process are conditioning factors which influence the type of planning structure proposed, and modify the details.

Wherever similar conditions are encountered an organization close to the one proposed can be applied. Modifications will be necessary where conditions differ greatly from those in Trinidad and Tobago. However, the principles on which the planning function is built and the general outlines of the planning process and organization are applicable to the development process in all developing countries.
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