TOWARDS THE DEFINITION OF AN ANNUAL PROGRAMMING AND PLANNING METHODOLOGY

Output of National Project for "Improving the Agricultural Policy Analysis and Planning Infrastructure in Trinidad and Tobago"
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# TABLE OF CONTENTS

## INTRODUCTION

### CHAPTER ONE:
The MALMR's Planning Infrastructure - A Historical and Organizational Perspective

### CHAPTER TWO:
Theoretical Framework of the Planning Process

### CHAPTER THREE:
Programming the Plans - Identifying the Details

### CHAPTER FOUR:
Institutional Pre-requisites

### CHAPTER FIVE:
The Methodology Detailed

## CONCLUSION

## FOOTNOTES

## REFERENCES
This paper seeks to document a planning methodology which could be used to support an annual planning process in the Ministry of Agriculture, Land and Marine Resources (MALMR), and the Division of Agriculture, Tobago House of Assembly (THA), in Trinidad and Tobago.

The need for such a method derives from the work of a number of agents who have made several recommendations for the improvement of the process. Their research suggests a clear need for the implementation of a structured approach to programming and planning the activities of these organizations so that resource use becomes focused towards the attainment of institutional objectives. Moreover, the introduction of an annual planning methodology is an expressed targeted output of IICA’s national project for “Improving the Agricultural Policy Analysis and Planning Infrastructure in Trinidad and Tobago”. This project is now being implemented as a pilot with the expectation that the methodology employed here could be transferred to other countries and agencies, in order to enhance the institutional strengthening process.

The identification of a specific methodology in this instance is important because of the special nature and modus operandi of public sector agencies, such as the Ministry of Agriculture. In these organizations, actions are invariably contemplated with a view towards obtaining balance between social equity and sector development. Hence, the process of goal and priority setting is often subject both to matters of financial and economic efficiency, as well as social or welfare considerations.

In such a scenario, it is usually difficult to focus resources and actions towards well-defined objectives. Moreover, even where objectives are specified, the detailed activities required for attaining the said objectives often remain undefined and shrouded in an array of public sector procedures and institutional norms. As such, organizations tend to operate in a manner where it is difficult to establish clear linkages between the expenditure of resources and the advancement of its objectives, be they national, sectoral or institutional.

Ultimately, planning becomes an end in itself to be carried out as a part of the annual agenda. However, with the absence of focussed implementation, supported by monitoring and evaluation, resources may be consumed with little evidence that targeted objectives are actually achieved.

The search for an appropriate planning methodology will take, as its point of departure, the definition of planning as a “continuous policy producing process” in which the elements of monitoring and evaluation and feed-back are integral. Planning will also be seen to involve a structured and informed process of goal and target setting, through a process of sectoral review, and resource evaluation and allocation.

The ultimate planning method therefore becomes one which is:

(a) structured, dynamic and continuous; and

(b) supported by the availability of timely information, and opportunities for internalizing feedback.

A suitable planning methodology must reflect all of these processes.

In striving to develop this methodology for the MALMR, a historical and organizational perspective on the planning function at the Ministry will be presented in Chapter One, followed by a theoretical framework of the planning process in Chapter Two. An evaluation of the programming approach to planning is discussed in chapter Three, and a summary of some of the institutional prerequisites for sustaining this methodology is presented in Chapter Four. In Chapter Five, a detailed methodological framework for planning is outlined, and conclusions on the prospects for implementation of process in Trinidad and Tobago are summarized.
CHAPTER ONE
The MALMR's Planning Infrastructure - A Historical and Organizational Perspective

According to Rudder, a formalized process of development planning in Trinidad and Tobago was evident from as early as the late 1950's when a Planning Unit was established in the then Office of the Premier. With the subsequent change of national status from a colonial to a self-governing country, this unit evolved to become the Economic Planning Division in the 1960's and ultimately, the Ministry of Planning and Development. During the decade of the seventies, national planning was centered in the Ministry of Finance and Planning with the Research Division of this Ministry servicing the overall planning function.

The approach to national planning has changed over time. From the early initiatives to the present has also changed over time. From the 1950's to 1970's, a broad-based multi-sectoral planning methodology was employed, manifesting itself through a series of five-year development plans. In the subsequent period, up to 1983 there was a regime of sectoral planning, which emphasized project planning as the method for directing the allocation and use of national resources. In the post 1983, period the multi-sectoral approach to planning was again embraced, with the elaboration of a new multi-sectoral task force assessment as the national development framework. This new focus also saw the establishment of a National Economic Planning Commission, comprising of representatives from government, business, labour and academia.

With respect to agricultural sector planning, up to 1968, matters relating to economics, trade and marketing of agricultural commodities were handled by the then Economics and Marketing Division of the Ministry of Agriculture. This Division, which was to eventually become the major designated agent for policy-making and planning for the national agricultural sector, was at the time possessed with four professionals and one administrative assistant. In 1968, it was reorganized and renamed the Agricultural Planning Division (APD) with the designation of two technical branches thus:

- planning and development, with responsibility for feasibility studies, economic surveys, evaluation and development of projects; and

- marketing and international organizations, focussing on agricultural marketing, farm management, international organizations and statutory authorities.

At the time of its reorganization, seven new posts were added to
the Agricultural Planning Division with a Director as head of the unit. By 1976, the APD had been further restructured to support additional responsibilities and activities in the following areas:

- Crops and Forestry
- Livestock
- Farm Management
- Statistics
- Clerical, Typing and Library

Adjustments to the structure of the Agricultural Planning Division were again effected in 1981 when the structure which now obtains was put in place. The APD now comprises four sections:

1. The Policy, Research and Planning Section with the following technical units:
   
   - Crops and Forestry
   - Livestock and Fisheries
   - Farm Management

2. The Programmes and Projects Section with the following units:
   
   - Project Formulation and Evaluation
   - Programme and Project Coordination and Control

3. Statistical Section

4. Administrative Services

Since 1981, there has been one adjustment, being the decentralization of the planning function to the Regional Offices in 1989. Under this arrangement, a number of planning staff was relocated with a view towards bringing the MALMR's technical services closer to its clients. The APD now has 19 professional officers in addition to administrative support staff, some of which are distributed between the Ministry's headquarters, the Regional Office North, and the Regional Office South.

The APD's staff are well-trained, most of them having obtained higher degrees generally in the area of agricultural economics, with specializations in economic development, trade, agribusiness, marketing, farm management, and production economics.
Additionally, there are number of first degree graduates with qualifications in general agriculture, statistics and mathematics, economics and management studies.

Further to these qualifications, almost all staff have received additional specialized training in areas, such as, project identification and design, macro-economic modelling, international marketing, trade negotiations, and agricultural policy analysis and planning. Table 1 shows a distribution of the current staff portfolio of the division, by the various units and functions. Most of the division's staff are also computer-literate and are comfortable users of standard micro-computer software.

In terms of working experience, most of the professional officers have been within the employ of the division for at least 3 yrs. However, there is a limitation with respect to relevant experience in policy analysis and planning, since most of the daily tasks undertaken by the division's staff do not involve the application of their training to the resolution of policy and planning problems. This, therefore, implies that engendering new planning and policy analysis approaches and methods in the APD would require some degree of training in order to improve the application of new analytical tools.

During the last five years, the Planning Division has served in both the development and supervision of a number of strategic plans, as well as, in the design and implementation of many key projects for the sector.

TABLE 1:

<table>
<thead>
<tr>
<th>Current Staff Distribution By Functional Units of the APD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry Sector</td>
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<tr>
<td>Milk/Dairy/Pigs</td>
</tr>
<tr>
<td>International Trade/CARICOM</td>
</tr>
<tr>
<td>Livestock/Others</td>
</tr>
<tr>
<td>Fisheries</td>
</tr>
<tr>
<td>Food and Nutrition</td>
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<td>Agro-industry/Sectorial Linkage</td>
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<tr>
<td>Budgeting</td>
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<td>Monitoring &amp; Evaluation</td>
</tr>
<tr>
<td>Statistics</td>
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<td></td>
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<tr>
<td>- 1 Planning Officer 111</td>
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<td>- 2 Planning Officers 11</td>
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<tr>
<td>- 1 Senior Project Analyst</td>
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<td>- 1 Project Analyst 11</td>
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<tr>
<td>- 1 Project Officer 111</td>
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<td>- 1 Statistician 1</td>
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CHAPTER TWO
Theoretical Framework of The Planning Process

In this chapter a theoretical basis for the development of an appropriate planning methodology is explored. This section will present a definition of planning, and appraise some of the key elements inherent to the process. These ideas will inform the rational for the formulation of a relevant planning method for the institutions targeted under IICA's national project, "Improving the Agricultural Policy Analysis and Planning Infrastructure in Trinidad and Tobago."

2.1. Towards a Definition of Planning:

According to de Las Casas and Cobas, the agricultural planning process can be described as a "continuous policy-producing process whose goals are to accelerate agricultural development within a desired framework of regional and national development." It is seen as a process for rationalizing governmental action, so as to enhance economic and social development.

Other technicians have presented related opinions on the definition of the subject. For example, Bentel and Gilat have defined planning as "an infinite erratic process" which comprises among other things, goal setting, execution and monitoring. Estefanel refers to the definition of the Latin American Institute for Economic and Social Planning viz "... the permanent and purposeful government activity that is done in a systematic way, which seeks the rationalization and preparation of governmental decisions and controls and evaluates their implementation within the context of national development and strives to achieve the goals set up for the agricultural sector."

However, it is important to recognize that, regardless of the principles used to define it, the planning process is always found to embody certain key principles and elements as described in section 2.2.

2.2 Key Principles and Elements:

2.2.1 Planning - A Continuous Process:

Firstly, planning is a process which is continuous. This realization is often contrary to the common perception of planning as a fixed activity which finds a place on the institutional agenda, usually at the beginning of the fiscal period, and the products of planning, once derived remain "shelved", only to be revisited at the next
planning session of the following fiscal period.

Within an operationalized framework however, the planning process is dynamized by on-going subprocesses being: (1) the periodic review of goals and objectives, (2) constant examination of activities to ensure consonance with goals, and (3) a day-to-day monitoring and evaluation of the implementation process. Planning is therefore more appropriately perceived as a cycle in which monitoring and evaluation, adjustment of activities and tasks contingent upon such evaluations, and revised goal and priority setting constitute a single on-going process.

2.2.2 Socio-economic and Political Influences:

Secondly, the planning process is fashioned by socio-economic and ideological-political processes which prevail both at the national and sector levels. Hence, in order to guarantee that the products of planning have the best chance of successful implementation, planning must integrate the interests and concerns of the specific target groups which are to be affected by its outputs, as well as the policy orientation of the state. According to de Las Casas and Cobas, planning can be viewed as a manner for integrating policy analysis and decision-making. These activities are in turn affected by sub-processes, such as, production, exchange, consumption and distribution, so that the planning process itself must be closely linked to processes in the socio-economic system.

By a similar rational, the planning process should be influenced by the ideological-political process, since the feasibility and efficiency of any policy measure depend heavily on its consonance with the "doctrinal position" of the political directorate, and the willingness of this body to support plans which identify with its ideologies. Ritson also advocates consonance with the state's "social welfare function" as a crucial pre-requisite for guaranteeing successful implementation of plans in support of various policy positions.

The practical implication of the above theoretical construct is that the planning process must provide time and space for the incorporation of the ideas and concerns of all parties with which the plan treats.
Hence, it is important that the planning system maintains constant contact both with important socio-economic agents and with the decision-makers and executor elements of the political-administrative system. Moreover, planning must also be supported by thorough technical and socio-economic analysis of all the background issues related to the plan. The latter is more commonly referred to as the policy review process, and is vital for ensuring not only, "external coherence" with the social welfare function, but also internal coherence between and among national and sectoral objectives.

2.2.3 Defining Clear Planning Goals/Objectives:

A third key element which derives from the approaches to defining the planning process is that this process must be guided by overall national goals and objectives. Hence, successful planning depends in large measure on a high level of integration and coordination between sector and national development plans and objectives. From this notion, it follows that at both the national and sector levels, social and economic objectives must be clearly defined. Plans when formulated must be applicable to these objectives, and such objectives should be tangible and measurable. This requires thorough knowledge and understanding of the issues, as well as the resources and political will necessary to sustain the implementation of the plans.

2.2.4 Policy Analysis and Priority-Setting for the Planning Process:

Because resources will always be limited, the specification of plans is always subject to a certain profile of priorities, determined by in-depth policy analysis. Setting of priorities is integral to the process of planning, and must be guided by goals and objectives, the policy framework in which plans are to be operationalized, and specific decisions of those charged with the responsibility for defining the state's social welfare function. In this regard, the planner's responsibility is to advise the priority setting process, rather than to determine the priorities himself.

The broadest possible scope should be employed in the judgement of priorities, and consideration should be given to factors and constraints which may have
Chapter 2 - Theoretical Framework of the Planning Process

significant bearing on the determination of such priorities.

Among some of these factors are:

- the policy framework in which plans are to be contemplated;
- budget and other available resources;
- available technology to support the plan;
- state of knowledge for supporting the plan; and
- infrastructure.

Wide collaboration critical to successful sector planning.

These factors should be examined carefully and related elements crystallized from each. Subsequently, these elements are weighted based on their relative importance in contributing to or limiting goal attainment. However, such determination is best achieved through wide collaboration with all parties related to the plan, as well as by thorough technical and policy analysis such as is obtained in a sectorial review. Planning research has identified three broad areas for attention during a process of policy analysis:

1. collection and systematization of information;
2. drawing up of alternatives; and
3. discussion of results.

Based on the theoretical framework circumscribed by the economic development objectives and the political process, a profile of information needs can be specified and organized into categories. Such information can then support policy analysis through parameter estimations and the establishment of important relationships within the context of a given theoretical framework.

Arising out of the above, alternatives can be derived and tested by simulations to determine the reactions of policy targets and unanticipated effects. Reactions should be measured in terms of benefits and costs of each alternative being tested.

Discussion of results is the process of consultation on the identified policy alternatives. This stage of policy analysis should benefit from internal discussion, as well as with other planning system elements, political executors and designated strategic groups of the socio-economic system.
2.2.5 A Systematic and Sequential Process:

Another very important element of a sound planning process, is a well established, structured and streamlined scheme of activities. Planning must be systematic and sequential. This is probably the single most important planning requirement which calls for a cyclical strategy to planning. The cyclical mode inherently calls forth the mechanisms of monitoring and evaluation, since the formulation of relevant plans for future cycles draws on the results of activities already carried out in previous cycles. The cyclical mode also establishes a timetable of planning activities, and signals the stages at which various planning subprocesses are to be initiated and completed. Moreover, it identifies the outputs and the responsible parties at various stages.

By its constant requirement for inputs to and outputs from planned activities, the planning cycle renders continuity to the planning process. Ultimately, planning takes its place as the guiding process of an organization's activities thereby ensuring that at all times the commitment of resources are focussed towards the attainment of organizational goals.

The movement towards these goals is flagged by obvious object indicators, and planned targets which will ascertain that objectives are being achieved. This, in turn, depends heavily on the establishment of a clearly ordered and timed set of planning activities. According to Bental and Gilat, "a strict and well-defined timetable is an integral part of the [planning] methodology".

2.2.6 The Need for Data and Information:

It is a commonly accepted notion that successful planning must be based on an appeal to relevant socio-economic and macro and micro-sector data. This paper makes no departure from this notion. It, however, emphasizes the importance of basing such data analysis on the most appropriate and accurate data, as well as on the application of the most technically sound theory-related models of analysis. Among the more commonly cited analytical models are: production function analysis; costs of production; consumer demand; supply and demand elasticities; rural and
urban demography; investment analysis; time series analysis and sector resource budgeting.

These types of analyses, particularly in the context of a planning cycle as described above, require an elaborate and up-to-date database for driving the planning process. The reliance of planning on available accurate information is sufficiently crucial so as to make the data-gathering and information management function an integral part of planning itself.

2.3 Conclusions:

The above discourse points to the fact that planning is a dynamic and on-going process, which draws its development from a wide range of technical disciplines. As such, in practice, the systematized planning process entails:

(a) drawing from as wide a frame as possible, the interests and concerns of the objects of planning:

(b) assessing these concerns in the context of current and relevant political, technical and theoretical models;

(c) drafting plans which can service the predefined goals and objectives at sector and national levels.

Priority setting is an important part of the plan formulation process.

Of importance also is that "true" planning embodies a series of activities which, bounded by the theoretical frame so far described, leads to a process which is efficient and adaptable to any political system. A fundamental element of this adaptability and efficiency is that this process allows itself to be continuously informed by the government's doctrinal position, and seeks to maximize coherence between plans proposed and the socio-economic situation, in which plans are to be realized. Such coherence is invaluable as a policy rationalization mechanism, particularly in a highly dynamic planning environment.
The theoretical framework forms the basis for the preparation of plans through a well-defined and structured planning process. This process leads to the formulation of outputs in the form of broad "action areas" which relate to a hierarchy of objectives, and a profile of resources. Indeed, the process guarantees internal coherence among plans. However, plans by themselves are not sufficiently detailed to provide a clear picture of the relationships among objectives, resources and outputs.

Programming is the process by which broad planning objectives are crystallized into details for implementation. While a plan by itself implies internal consistency and coherence, the programming of plans should explicitly demonstrate the existence of such consistency. Plans are defined as methods or schemes for action, procedure or arrangement, and always imply mental formulation, and sometimes graphic representation. Programming takes the plan one step further towards the identification of interim objectives and goals, and the specification of activities and tasks to achieve these goals. Moreover, it determines the indicators and methods of measurement which will guarantee achievement and specifies the resources, target dates, contingencies and limitations which may affect goal attainment.

When completed, programmes should present clear relationships between activities, tasks, resource availability and requirements, and outputs and objectives. A well programmed plan should provide clear insights as to the key elements to be monitored during implementation of the plan, as well as, the critical activities and tasks which may limit the realization of objectives. Most importantly, programming should make obvious all those activities and resource consumption which do not contribute to the attainment of objectives. These issues are examined in this chapter.

3.1 Streamlining Programming Objectives:

Programming is the stage at which the detailed objectives of plans are prepared. The first step of the process involves the further streamlining of the total set of national, sectorial and institutional planning objectives. This very important step requires constant reference to the goals and objectives of the plan so as to ensure that activities when programmed can actually contribute to the achievement of planning objectives.

Key areas of investigation at this stage include questions about how realistic and feasible are the objectives; existence of a
suitable technology or methodology for achieving them; the adequacy of the planning time frame to realize the objectives; the existence of valid indicators for measuring goal achievement; the adequacy of the institutional structure to support the targets of the objectives; and the sustainability of the objectives given the resource base available to the plan.

Profound analyses of these issues may require a re-examination of institutional roles and functions so as to clearly articulate the mandates of those institutions involved in implementation of the plan. This is especially important, since programmes may identify key roles for agencies expected to participate in implementation, only to find that such agencies possess neither the mandate nor the resources to play such roles. Moreover, some indication of the technical feasibility of the objectives should be indicated by references to relevant case studies, examples or past experience.

3.2 Defining the Programmes:

From a clear position of the roles and objectives of the organization, progress can be made towards the definition of relevant programmes which will be supported by the institution. The organizational chart of the institution is usually a very good indicator of the profile of programmes which can be expected, based on the pre-determined organization role. This is especially likely if the institution is organized along functional rather than administrative lines. A programme may be viewed as an inter-related set of operations, defined by a common objective function which in turn is related to other objectives in the realization of overall institutional goals.

3.3 Identifying Activities and Tasks:

Having established the programmes, the next stage is to specify in detail and sequence, all of the activities and tasks required to attain programme objectives. This process will be informed by the base of technical information and experience related to the particular activity or programme. The choice of activity will also depend on other decisions made at the objective streamlining stage (3.1).

The following example serves to demonstrate the point. If, for instance, one is required to prepare agricultural plans to support a process of increased agricultural exports, a previous sector review may determine that an increase of agricultural exports, by 5% per year, requires an investment of $100 additional resources per year. If it was determined at the objective streamlining stage
Ideally, the preparation of the technical elements of an activity should be undertaken by the relevant technical specialists.

That only an additional $80 per year would be available to support this plan, then an implementation activity which calls for the consumption of $100 or even $90 would be infeasible.

Ideally, the preparation of the technical elements of an activity should be undertaken by the relevant technical specialists, who would be charged with the responsibility for implementing such activities. Their inputs should be supplemented by those from budgeting and costing specialists. An example of a detailed activity plan is presented in figure 3.1 below. The preparation of activity plans may be a phased process in which technicians within specific programme areas, prepare the technical aspects of the activity, while the final details are supplied by a Work Planning and Budgeting Section of the Planning Unit.

**Figure 3.1**

**Activity Summary**

<table>
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<tr>
<td>Division:</td>
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<td>Subject:</td>
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</tr>
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<td>Approval Date:</td>
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</tr>
</tbody>
</table>
3.4 Aggregation of Activities into Programmes:

The use of micro-computers is invaluable to detailed programming.

The final stage of programming is to prepare, from the large number of activities, a comprehensive work programme of activities and tasks for each programme identified. At this stage depending on the number of activities, the use of a computerized integrated database system becomes an invaluable tool. Such a system can allow programme planners to enter activities as individual database records which can then be analyzed and grouped by programmes, resource budgets, tasks or other required formats. Ingle and Smith recognized this particularly valuable aspect of the application of micro-computers to the management of agricultural organizations. They made specific reference to the use of the micro-computer in the preparation of the resulting work-plans, schedules and resource budgets, as well as in the documentation and storage of formats and the description of activities, inputs and expected outputs, externalities and execution details. Such a system can also provide pre-defined reporting as well as monitoring and evaluation of formats to allow timely reports on activities once programme implementation has begun.
CHAPTER FOUR
Institutional Pre-requisites

It should be clear by now that the successful installation of an efficient planning process requires a priori, an institutional environment, which is accommodating and sufficiently dynamic to facilitate the process. The key institutional requirements may be detailed as: a well defined goal-setting and objective definition mechanism; adequately trained human resource; an organizational structure with clearly demarcated roles for its planners; an adequate information management infrastructure; an extra-institutional network with a clear mandate to support the planning process; and an institutional commitment to support and sustain the process.

4.1 Sound Goal Setting Mechanism:

Since effective planning begins with the definition of clear goals and objectives, the planning agency should be adequately endowed with a functional mechanism by which goals and objectives are determined and constantly assessed against the dynamics of the planning environment. In the context of the agricultural sector, goals are set which will impact both on the sector itself and on the wider economy. The mechanism for setting goals should therefore be one which facilitates the inputs of all the agents that are likely to be influenced by the planning outputs. Such a mechanism should also be able to:

(a) readily filter broader national development policies into the goal setting process at the sector level; and

(b) analyze and interpret key elements of these plans.

In this regard, the input of agencies, such as, national planning units, research organizations, farmers organizations, cooperatives, export agencies, distributors, and financiers, among others is crucial. Moreover, the mechanism should describe a technical framework for evaluating goal options, setting priorities and scheduling the stages of evaluation of goals and achievements. Bental and Gilat have cited factors, such as, existing policy, budget, timetable, infrastructure, available knowledge and technologies, as important parameters which may be weighted in the determination of priorities.

4.2 Extra-Institutional Network:

Because of the need for the inputs of other agencies, sound planning also requires an organized network of relevant bodies.

The mechanism for setting goals should be one which facilitates the inputs of all agents.
to make inputs to the process. Since planning is a dynamic and continuous process of policy formulation, this formalized network is important. Hence, participants in a planning network require a clear mandate to participate in the process, and should be sufficiently informed of their role and responsibilities in such a process. Some of these responsibilities include the need to provide, in a timely manner, responses and concerns related to policy issues proposed by the planning unit. The institutional network may also be responsible for supplying relevant technical information and providing in-depth analysis to specialized areas within the plans. Hence, in planning for a policy on export agriculture, a body of agricultural exporters may provide to the Planning Unit, insights and experiences considered crucial to informing the issues for analysis in the overall plan.

Finally, the extra-institutional network must be recognized as an integral part of the planning process, and must figure in the overall reporting process of the agency charged directly with the preparation of plans. Indeed these bodies, especially where they have direct bearing on decisions which may affect the implementation of plans, or have an integral role to play in overall sector review, and evaluation of planning goals and objectives.

4.3 Adequately Trained Human Resource:

In the context of the stated planning process in which a wide range of disciplines are required, adequate staff reflecting these disciplines is an important pre-requisite. As such, the following skill areas are critical:

- programming and work-planning
- priority setting
- costing and budgeting
- policy analysis
- project identification and design
- monitoring and evaluation
- information management

These areas should be adequately supported by specialized related skills in:

- agricultural resource use
- marketing and trade
- finance and credit
- agronomy and agricultural production
For all these areas there should be adequate numbers of trained personnel in order to fulfill the key areas of the overall planning cycle. Of course, a minimum level of computer literacy and competence is also important to sustain a dynamic and efficient planning unit.

4.4 Suitable Organizational Structure:

A suitable organizational structure is also an important factor which can influence the effectiveness and efficiency of the planning process. An adjustment of the organizational structure is invariably required at levels of both the planning unit and the overall organization.

At the level of the planning unit, it is important to identify two key functional units viz: Work Planning Unit and a Budgeting and Costing Unit. These units will have the responsibility for preparing the organization’s policies, work-programmes, budgets and projects. The Work Planning Unit will prepare, monitor and evaluate workplans from identified activities, and will continually assess activities to ensure consonance with overall objectives. The Budgeting and Costing Unit will assist the other units in assessing costs for various activities, and developing and monitoring programme budgets.

The Policy Review Unit will support a wider planning department in undertaking the technical analysis required for the setting and evaluation of goals and objectives, the justification and validation of programme and project activities, the measurement of goal attainment and assessment of programme impacts, and the management and maintenance of a technical database. These units have a role to play in activity and project identification and design.

A suitable organizational structure is also required at the broader institute level, in order to accommodate a continuous planning process and its attendant monitoring and evaluation functions. Firstly, the organization must be adapted to accommodate the planning network as discussed above. It should therefore have a formalized linkage with established sector and commodity review committees, as well as support institutions, and subject-matter specialists. Moreover, the organization should adopt a well-defined planning schedule where inputs of planning at various stages are delivered from timely implementation of planning activities in previous stages.

Finally, the overall organization ethos should be one which identifies a role for all departments in the planning process, at
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Finally, the overall organization ethos should be one which identifies a role for all departments in the planning process, at
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A suitable organizational structure is also an important factor which can influence the effectiveness and efficiency of the planning process. An adjustment of the organizational structure is invariably required at levels of both the planning unit and the overall organization.

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Finally, the overall organization ethos should be one which identifies a role for all departments in the planning process, at
the same time recognizing the management responsibility of the Planning Unit in such a process. Hence, technical divisions should play their role by preparing, in a timely manner, the technical activities which will be incorporated into various annual work plans. Moreover, they should also be prepared to contribute to periodic monitoring reports on these activities, once the implementation process has begun.

4.5 Adequate Information Management Infrastructure:

The need for an adequate and suitable information management infrastructure derives from the nature of the planning process as described in Chapter 2. Planning, as a continuous process of goal setting, policy formulation and monitoring and evaluation, requires a well-structured and efficient information management system, in which lines of information flows are clearly defined, and a schedule of reporting is established. This system should also assign responsibilities for its support and management at all institutional levels, so that the movement of information critical for the total planning process is guaranteed. The application of information technology is not always a necessity for managing information systems. However, the size of the institution, its attendant volume of planning details, as well as frequency of reporting make a very instructive case for the application of this technology.

Ideally, a system should provide:

(a) adequate capacity for the storage and retrieval of large amounts of data;

(b) relevant software for the analysis of policies, projects and other technical issues; and

(c) suitable reporting capability with a range of formats to match the information needs of the institutional hierarchy.

4.6 Institutional Commitment to the Planning Process:

The extent to which the benefits of the planning approach are realized will depend significantly on the commitment of the institution to the process. This factor is arguably the most crucial in determining whether the process will be sustained in any organization. It should be apparent by now that the total planning concept requires a high level of management discipline for its success. It demands an earnest commitment to the scheduling requirements of the process, and to the detailed technical
analyses which will lend confidence to planning. Moreover, it should ensure that the widest range of issues are consistently internalized into the planning method and that planning decisions are made on the basis of such input.

Ultimately, planning becomes dynamized when its outputs are constantly monitored to ensure that programmed activities and resources are always focused towards the attainment of objectives. This requires a sincere belief in the overall planning method as discussed above.
In this chapter, an attempt is made to specify a generalized methodology for undertaking annual planning activities in a public organization, such as, the Ministry of Agriculture. To do this, consideration is given to many of the theoretical issues presented so far, and the implications of these are explored. It will be seen that, in a practical sense, the application of the planning process points to the implementation of a periodic planning cycle in which specific planning activities are scheduled and carried out. These aim to achieve continuity and consistency in goal setting, policy formulation, allocation of resources in accordance with goals, and an ordered process of monitoring and evaluation. The methodological details also indicate those actions required to prepare the institution for the process and to establish the supporting planning network for the total planning concept. The sequence of activities which follow represents a general schematic of this planning cycle. Some of these activities may take place simultaneously, while others depend on the completion of key steps.

5.1 Step 1: Evaluation of Institutional Role:

The first step in planning should be the evaluation of the institutional role of the organization. This evaluation should clearly determine the purpose for which the organization was established, its terms of reference, and the legal empowerment with which it is possessed. This framework in turn will determine the type of goals which the organization can set for itself, and the manner in which it can participate in the attainment of goals in other organizations, or at the sector or national levels. It may be necessary to re-assess stated as well as actual organizational roles, in order to ensure concurrence. Such evaluation, taken in the context of the institutions legal and constitutional framework, its resources and other existing organizations, may lead to a redefinition of these roles.

5.2 Step 2: Setting up the Planning Network:

This is an important early step in order to facilitate the incorporation of key participants in the specification of planning objectives. This network may consist of groups which provide technical inputs at various levels. Agencies, such as, national planning commissions, ministries of planning, finance and trade, public utilities and other regulatory bodies may provide valuable input in establishing consistent linkages between national and sectoral objectives, and ensuring concurrence of plans with the regulatory framework. Similarly, sector review and commodity committees, as well as special interest associations, can lend
invaluable support by providing technical input to goal/objective specification. The linkages of the networks to the central agency should be formalized by appropriate notification and specified terms of reference.

5.3 Step 3: Setting of Goals and Objectives:

Step 3 is the determination of goals and objectives and their evaluation for consistency at the institutional, sector and national levels. Goal setting will depend on the conduct of in-depth technical analyses to identify problems, limitations, and opportunities which can be addressed in order to advance the attainment of goals at all levels. Within the agriculture sector, for instance, this process will require the undertaking of status analysis to ascertain the current state of affairs, and policy review to evaluate the impacts of recent policy initiatives on the sector. It may also involve physical planning in order to assess the resource capacity available for meeting certain ends.

Consistency among plans is established by thorough analysis of policies and plans at sector and national levels. It is at this stage that the support of the planning network is invaluable as a technical pool of informed specialist who can assess and resolve the inherent linkages among plans at various levels.

5.4 Step 4: Installation and Training in Relevant Supporting Databases:

The preparation of the institution for a highly structured annual planning method should also involve the a priori introduction and training in the relevant tools for the process. Such tools should include data analysis systems to support in-depth technical analysis for policy formulation, information management databases for collating necessary planning data and reporting and documentation systems for monitoring, recording and communicating plans and achievements. The institution's personnel should be sufficiently prepared to used these systems by the time the formalized planning method is introduced.

5.5 Step 5: Conducting Policy and Sector Reviews:

Steps 1 to 4 are essentially start-up stages to the implementation of an annual planning regime. As such, the previous activities are not likely to be undertaken on an annual basis, except where operational and organizational adjustments are made over the medium to long term.
The annual cycle of policy analysis and planning begins in this step with a review of existing policy and sector performance. This step, and the others which follow, represent the fundamental planning activities which are repeated on an annual basis.

The purpose of policy and sector review is to evaluate the impact of policies pursued over the last planning cycle (the existing policy matrix), and to determine those areas of constraint and achievement as manifested in the sector review. This step informs the setting of goals for the next annual planning cycle, and guides the formulation of annual goals and the identification of possible projects and activities for implementation. It also provides some indication of the feasibility of targeted goals and the likely efficacy of methodologies to be employed for achieving targets in the next round of planning.

Policy and sector review also affords the opportunity to record systematic and stepwise advancement towards medium and long-term sector and institutional goals. The results of policy and sector reviews are internalized into an updated policy matrix which forms the framework for programs and projects in the next cycle. However, prior to such incorporation, the review's reports should be circulated among the planning network and an opportunity given to incorporate its comments into the new policy matrix. Planning can now proceed to the next stage of the cycle.

5.6 Step 6: Detailing Programmes and Plans:

Subsequent to policy and sector review, specifying the details of the programmes and plans and projects is the next logical step. The development of these details is based on the new policy matrix which is updated in accordance with the findings of the policy and sector review. At this stage of the planning cycle, specific activities and projects to be undertaken in order to fulfill the broader policy objectives are identified, and all planning and logistical details important for their implementation are specified. Such details include activity identification (activity title, implementing department, activity year, activity code), justification, goals and objectives, key target dates, target outputs, achievement indicators, external conditionalties, resource budgets, persons responsible and approvals.

These details together form the annual programme of work for the organization. Moreover, assuming an internally consistent process of detailing the activities, this derived annual work programme should reflect the current policy matrix, as well as medium to long term goals for the organization. Some policy objectives may not be attained over a single planning cycle and
may require the detailing of a number of annual plans in order to achieve the longer term objectives. In this case the specification of activities in support of such policy objects should identify the intermediate outputs and targets, as well as the resources required to achieve these intermediate goals.

Ideally, the organization should identify a specific period in the fiscal year when it will devote its energies to the programming of planning details. This process should begin with the preparation of the new policy matrix and the communication of this new matrix to all departments. The department head should then provide leadership in the internalization of the matrix in his/her department. This should be done by defining the framework for activities relevant to his department and the policy matrix. The head of a research department for instance may issue programming guidelines to his technicians which direct them to focus only on the targeted commodities within the policy matrix. The actual preparation of programming and planning details should however be undertaken by the technicians themselves, since they may be best able to judge the resource requirements, time frame, and methodological and technical imperatives for the attainment of outputs.

5.7 Step 7: Entering the Programming and Planning Details to a Database:

By now it should be apparent that the management of programming details as discussed above could be extremely challenging without the application of modern computer facilities to support the process. Recognizing that large organizations, such as Ministries of Agriculture usually possess many departments, each of which manages a large number of projects and activities, the need for micro-computer support then becomes obvious. Moreover, as programmes and plans are prepared, implemented and monitored over time, additional data and information will be generated and will require systematic management. The computer then becomes a vital tool for the total planning process, for both actual planning management, and routine analytical processes necessary for informing planning and policy decision-making.

5.8 Monitoring and Evaluation:

Within the regime of annual planning, the purpose of monitoring and evaluation is to measure the conduct of activities against the stated targets, and to identify areas of constraints which may affect the attainment of planning objectives. In this context, evaluation is carried out to determine the extent to
which activities and projects undertaken during the current planning cycle are contributing to the attainment of intermediate and longer term goals. Hence, both monitoring and evaluation are continuous processes, the results of which should provide a sound basis for undertaking the subsequent round of policy and sector review. This is possible since it is through monitoring and evaluation that necessary adjustments and the circumstances which led to such adjustments are recorded. Also, where departures from the programmed activities have taken place, monitoring can serve to rationalize such modifications to the plans. Moreover, the outputs of monitoring and evaluation form the basis for annual reporting and review.

A suitable monitoring and evaluation process should determine a priori, a schedule of reporting, who should be required to report, on what elements such reporting should be based, and the profile of actors in the organization who will be expected to respond to the findings of monitoring and evaluation. Obviously, this step of the overall planning cycle is manifested even at the work planning stage when appropriate targets and achievement indicators are identified. The integral nature of monitoring and evaluation to planning cannot be over-emphasized.

5.9: Outputs and Benefits from the Annual Planning Process:

The application of the above methodology should generate the following key products for each cycle:

- Institution's Annual Report;
- Annual Technical Review;
- Revised Policy Matrix (subject to findings from annual technical review and policy review);
- Series of monitoring/evaluation reports;
- Reporting Schedule;
- Annual work-plans (including objective set, activities and expected outputs);
- Annual Budget.

In terms of benefits, some of the more obvious of these include:

- **the incorporation of results of previous plans into current plans**: the annual planning process engenders continuity in planning since it draws on previous outputs in order to validate future activities.

- **forces the evaluation of current circumstances in the preparation of annual plans**: current circumstances are
defined in the context of the outputs achieved from previous cycles, and are appraised during the annual review. This then forms the basis for the subsequent cycle of planning.

- defines a monitoring and reporting schedule for assessing the implementation of plans; because the preparation of annual reports depends on the continued reporting on implementation activities a reporting schedule has to be defined in order to ensure the assessment of relevant indicators of achievement over time.

- identifies a priori the parameters to be used for monitoring the implementation process; this is related to the above and establishes the objective basis by which one is informed that targets are being achieved.

- provides a suitable timeframe for internalizing feedback from the implementation process, and making adjustment to plans; one year is considered an adequate gestation period for reflecting on past activities, to guarantee consistency of activities with goals.

- monitoring and evaluation more closely linked to the implementation process; the annual planning process is continuous, and major planning and policy analysis activities are linked by monitoring and evaluation.
By the time the annual planning process is institutionalized in an organization such as the MALMR, an end-status system such as shown in figure 5.1 should be evident.

**Figure 5.1**
Overview of End-Status System
CONCLUSION

We have seen that the annual planning methodology is a dynamic, continuous process which involves all levels of an organization. It aims to establish clear relationships between an organization's goals and the use of its resources, in a logical and structured manner. Clearly, this process requires a high level of institutional organization, as well as management discipline in order to derive the benefits of the approach.

In Trinidad and Tobago, a number of developments have already conspired to afford the MALMR an excellent opportunity for institutionalizing this approach to planning. Firstly, this institution has been subject to in-depth institutional analysis which has identified both the current strengths and weaknesses inherent to the prevailing planning process. Secondly, the MALMR already possesses much of the required technical resources to implement the process. This includes trained personnel, physical infrastructure and information management resources.

Thirdly, the national government has embarked on a process of public sector reform with the aim of improving the internal management of a number of public sector institutions. This reform process contemplates many of the issues relevant to the annual planning process, and the MALMR has been selected as a pilot agency for this reform exercise. Finally, the MALMR has the support of a number of national, regional and international agencies from which it can draw in the institutionalization of the annual planning method.

Hence, notwithstanding the real challenges to implementation of the process, as national and organizational resources become increasingly scarce, the guarantee of goal attainment relative to resource use becomes a most important imperative. This is the ultimate benefit of the annual planning methodology.


5. Webster's New Collegiate Dictionary.


7. Physical planning here is interpreted to mean the evaluation of resource inventory (physical, capital and human).

8. This is one of the primary objectives of IICA's national project, "Improving the Agricultural Policy Analysis and Planning Infrastructure in Trinidad and Tobago". This project will introduce to the Ministry, IICA's Information System for Agricultural Policy Analysis (SIAPA), the AGSYS Budget Generator, and FAPRO. It will also design a specialized Planning System for assisting the Ministry in the planning, monitoring and evaluation of its programmes and projects.
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Towards the definition of an annual programming and planning methodology