Ain Shams University Faculty of Engineering Urban Planning Department

# Management of the Urban Development Operation In New Settlements in Egypt

#### By

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In the Name of God, Most Gracious, Most Merciful.

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**STATEMENT** 

This dissertation is submitted to Ain Shams University for degree of

Ph. D. in urban Planning. The work include in this thesis was carried out

by the author in Department of Urban Planning, Ain Shams University.

No part of this thesis has been submitted for a degree or qualification

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# **ABSTRACT**

This thesis examines the practical aspect of urban development which deals with managing the urban development operation in new settlement in Egypt.

The first chapter defines the levels and categories of both planning and management and the correlation between them. The second chapter deals with the theory and practice of Urban Development Management in new town. The third chapter deals with the Egyptian experience in managing new towns development and finally the thesis propose a new concept for managing the development operation of new towns and the administrative and organization structure of the authority dealing with this operation.

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# LIST OF ABBREVIATIONS

CAD : Computer Aided Design

Dept : Department

GIS : Geographical Information System

MBO : Management by Objectives

NIDA : New Town Development Authority

Introduction 1

#### INTRODUCTION

The management component of the planning process has been given secondary importance in the conventional planning approach. The implementation of new towns in either Egypt or other countries was considered as a construction process for a fixed land use plan. Due to the long time spent in achieving the final stage of construction, the development process has been affected by many changing factors which deviated parts of the initial land use plans from their objectives. Due to this fact the last generations of new towns in England have been given special consideration in order to provide more flexibility for changing the land use pattern when necessary, to cope with any deviation expected in the socio-economic or physical factors.

Settlement planning, especially in the form of traditional land use concept has often proved an ineffective instrument for guiding the rapid development of new towns. This is because in many cases it has become isolated from the main decision making process which determines what, where and when development takes place. More effective planning requires, therefore, a better understanding of the means available to guide and control the development operation in new towns. This is why it becomes necessary to see how this can be managed and how planning can become the key tool to guide the management process. This issue involves the study of the potential for resource mobilization related to action planning process.

The management of the urban development operation has become widely recognized as the key tool in the action planning of new towns in Egypt as well as abroad. Building the organizational structure of management and how it operates in new towns in Egypt is the main objective of this thesis.

It was necessary first, to review the components of the traditional land use planning and how they operate in the development process. The different

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Categories and levels of planning have been considered in the beginning of this thesis in order to examine the decision making process at each level and for each type of planning process. On the other hand, it was necessary also to review the different type of management affecting the development operation in new towns, starting from construction management, to project management, to housing management and to physical and urban management. Due to the diversities in planning concepts it was necessary to review the changes which occurred in these concepts in the light of follow-up and evaluation of planning experience in practice. The main feature of these changes was the transformation of preparing master and physical plans into operational process involving the development of social, economic and physical components.

The second chapter of this thesis refers to the theory and practice in the management of urban development of new towns. This includes both the conventional planning process and the management of urban development operation in general. Special reference was given to the decision making process in managing the urban development as the main factor affecting the planning operation. The British experience in this field was reviewed in a more comprehensive manner as a main source of reference. The management aspects of this experience were thoroughly examined as being closely related to the subject of this thesis.

The third chapter deals with the Egyptian experience in the management of urban development in new towns with special reference to "Tenth of Ramadan" new town. This study refers to the history of new towns in Egypt since 1975 until the present time within the national urban strategy. The administration of new towns in Egypt has been examined in more details showing the role of all relevant agencies engaged in the development operation. Special reference was given to the evaluation of the Egyptian experience from the point of view of planning and management along the different phases of implementation and the change from centralization to the participation of new settlers and industrial investors.

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The findings of the first three chapters reveal the possibility of putting the main principles for upgrading the management of the development process of new towns in Egypt. This includes the proposed structure of the development process of new towns as well as the function of the relevant management organization. This approach requires the search for new planning concept which copes with the proposed management process and the dynamics of urban development of new towns. Accordingly, a comprehensive approach to the management of the development process in new towns in Egypt was achieved including all the relevant aspects such as the preinvestment studies, the design of the development process and the design of the relevant management process. The fourth chapter ends with the description of the functions of the different departments included in the proposed administrative structure required for the different stages of development and in accordance with the decision making process. A planning module is used as a tool in the planning process in order to provide the maximum flexibility along with the organic and comprehensive growth of new towns. This is where physical planning can be based on the management concept to be applied in developing the new town.

It is worth mentioning here a statement cited in the 6Znd course program organized by the international Institute for Housing and Urban Development Studies (IHS) in Rotterdam in January 1993, Quote: "Development planning, especially in the form of traditional land use planning, has often proved an ineffective instrument for guiding the rapid development of cities. This is because in many cases it has become isolated from the main decision making processes which determine what, where and when development takes place. More effective planning requires a better understanding to the means available to guide and control city development how these can be managed and how planning can become the key tool to guide the urban development process". *This Thesis illustrates this statement*.

#### **CHAPTER ONE**

1. Planning and Management: Categories, Types, Levels and Correlation

#### 1.1 Categories and Levels of Planning:

- 1.1.1 Urban planning.
- 1.1.2 Urban development.
- 1.1.3 Economic planning
- 1.1.4 Physical planning
- 1.1.5 Social planning
- 1.1.6 Levels of planning.

#### **1.2** Types of Planning Process:

- 1.2.1 National planning process.
- 1.2.2 Sartorial planning process.
- 1.2.3 Physical planning process.
- 1.2.4 Project planning process.
- 1.2.5 Organization and management of the planning process.
- 1.2.6 Project execution process.

#### 1.3 Types of Management:

- 1.3.1 Definition of management.
- 1.3.2 Management of Development.
- 1.3.3 Urban planning management.
- 1.3.4 Physical planning management.
- 1.3.5 Project management.
- 1.3.6 Housing management.
- 1.3.7 Construction management

#### 1.4 The Changes of Planning Concepts:

- 1.4.1 The transformation of physical plans into operational process.
- 1.4.2 The change from producing master plans to the operation of a Planning process.
- 1.4.3 The change from technical operation to more political integration.
- 1.4.4 The change from land use control to management of growth.
- 1.4.5 The change from implementation to realism in planning.
- 1.4.6 The change from assuming institutional adequacy to institution Building
- 1.4.7 Correlation between planning and management.

#### 1.5. Conclusion

Chapter One 4

#### 1. PLANNING AND MANAGEMENT: CATEGORIES,

#### LEVELS, TYPES AND CORRELATION

INTRODUCTION

This chapter is concerned with defining the categories of planning, types of planning process, levels of planning, types of management, and the relation between planning and management. It is important to choose the precise definition of each terminology, because it is the base on which the thesis is built. Any terminology can have more than one definition and that can be misleading. This is done according to different circumstances, conditions, and the objectives of using each one, and also, according to their different discipline's background whether it is field experience or academic theory.

#### 1.1 Categories and Levels of Planning

Basically, planning is merely a process which develops a method for doing something. Urban planning is the organization and management of the human environment. Economics is the science of the management of resources. Physical planning deals with the material environment. Social planning deals with the people conditions.

Planning could be categorized as follows:

## 1.1.1 Urban Planning

Urban planning deals with the physical and socio-economic aspects of any urban area. It surveys the existing conditions of the urban area and then analyzes estimates and proposes its future physical and socio-economic conditions after a certain period of time. The output of the urban planning work is presented in reports and maps. The proposed urban planning is the output of a planning process, which deals with many changing and uncertain conditions and which can be totally different in the near future.

# **1.1.2** Urban Development

Urban development coordinates the physical development of any urban area with its socio-economic development. Urban planning is considered as an element of the physical development besides management, organization, implementation and maintenance aspects.

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fixed end. This process is changeable according to changes in different circumstances affecting the urban development operation. To achieve the urban development operation objectives, a regular staff of planners, architects and other assistant staff members have to be available at the site to survey, evaluate, control and replan the development operation.

#### 1.1.3 Economic Planning

Economic planning in most developing countries is considered a national approach to guide the socio-economic development programs within a regional context. Less consideration is given to the spatial dimension which has its implications on the physical aspects of planning.

### 1.1.4 Physical Planning

Physical planning is more closely associated with the regional and local scale, controlling the market mechanism, reconciling public and private objectives, and directed toward the special qualities and relationships of developments (1).

#### 1.1.5 Social Planning

Social planning is more concerned with the development of human Resources in order to improve the standards of living, culture and productivity.

## 1.1.6 Levels of Planning

Integrated planning levels are defined at the national, regional and local levels. This is where socio-economic and physical aspects are integrated. In other words, this is where sectorial planning is integrated in a national development program, including sectorial projects in volumes and investments.

# **1.2 Types of Planning Process**

#### **Definition of planning process:**

There are many individual definitions of planning. Certain features of planning in general can be identified. Major features of general planning include a sequence of actions which are designed to solve problems in the future.

The planning problems vary but tend to be primarily economic and social.

John Radcliffe, <u>An introduction to town and country Planning</u>, Hutchinson Educational, 1974, P: 7.
 Chapter One

The planning period, also varies according to the type and level of planning. Any planning involves a sequential process which can be conceptualized into a number of stages, such as (2):

- a) Identifying the problem.
- b) Formulating the general goals, more specific and measurable objectives relating to the problem.
- c) Identifying possible constraints.
- d) Projecting future situation.
- e) Generating and evaluating the alternative courses of action.
- f) Producing the preferred plan, which in its common form might include any Policy statement or strategy as well as a definitive plan.

This process is relevant to the whole spectrum of planning problems which Friedman summarized in his definition: "Planning is primary a way of thinking about social and economic problems, planning is oriented predominantly toward the future, is deeply concerned with the relation of goals to collective decisions and attempts for comprehensiveness in policy and program. Wherever these modes of thought are applied, there is a presumption that planning is being done, (3).

Within this general planning frame work there is a wide variety of types of planning processes which are classified as follows:

- i. National planning process.
- ii. Sectorial planning process.
- iii. Physical planning process.
- iv. Project planning process.
- v. Organization and management of the planning process.
- vi. Project execution process.

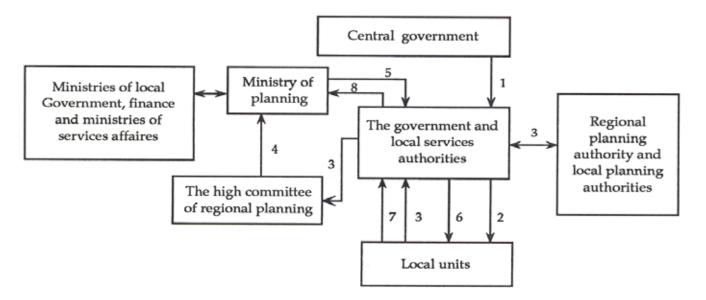
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# 1.2.1 National Planning Process

<sup>2.</sup> John Glasson, <u>An introduction to regional Planning</u>, Hutchinson education, 1974, p: 4.

<sup>3.</sup> Friedman, J. <u>Regional Planning as a field of study, in Friedman, J. and Alonso W.</u>, Regional development and planning, P.: 61, MIT press Cambridge, Mass. (1964).

The national planning process varies according to the political status of the country. In Egypt the national planning process aims at achieving the general policy and objectives of the national development plan. The national planning process is done through coordination between the central government and localities. This coordination can be considered as a relation between two partners, one great and the other small, acting together to fulfill the aims of development in all the social, economic and urban fields; and on all levels starting from the regional level, to the governorates, to the local units. The national planning process achieves its aims through the proper arrangement of steps taken by both the central government and the local units. The following diagram presents the different steps of the national planning process.(4) - (Fig. 1.1.).



- Step 1 + 2 General policy of the national development plan
- Step 3 The proposal local development plans and its budget.
- Step 4 The proposed regional development plans and its budgets
- Step 5 + 6 The approved plans and its budget.
- Step 7 + 8 Reports of following up the execution of the plan

#### Fig.1.1. the National Planning Process

4. Dr.Farouk Yousef, <u>Local administration and its relation with the central government.</u> The central authority for administration and organization, Administrative leader programs, 3-1989, (In Arabic).

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# The Different Steps are Explained as Follows

- Step 1 The central government informs the governorates and local authorities of the general policy and the main objectives of the national development plan which the governorates study and then inform the local units in order to set their local plans.
- Step 2 Each local unit undertakes to arrange its needs according to well considered priorities depending on the fact that the localities are responsible for preparing the comprehensive development plans of the local communities based on: the available potentialities of the local Societies, available profitable investment chances, the awareness of the Actual needs of the people and in the light of the instructions for setting the plans. Available resources are allocated according to the local plans priorities to be approved with its budget plan by the public council of the local unit. The local public council reports the approved plans and its budget to the governorate public council.
- The planning authorities of the governorate, with both the regional planning authorities and the local authorities, study the proposed plans submitted by the local public council in each governorate. In order to prepare the annual plan project and its annual budget, coordination and integration would be achieved between the requirements of different sectors and local units. The proposed annual plan and its annual budget have to be submitted to the local public council of the governorate to be approved.
- Step 4 After the local public council of the governorate approved the proposed annual plan and budget, they have to be presented to the high committee for regional planning which coordinates the plans of different governorates and approves the proposed projects priorities according to the available potentialities and resources. Then, the approved proposed plans and budget have to be submitted to the Ministry of Planning.

Step 5 The Ministry of Planning studies the regional plans and coordinates their activities, with respect to the national plan objectives, with the ministry of local government, the ministry of finance and other sectorial ministries. The Ministry of Planning aims at achieving a balanced growth of both the governorates plans and different sectorial plans according to the national development plan objectives.

- Step 6 The final development plans and its budget, after being approved by the Ministry of Planning, are reported to each ministry and governorate for the execution of the approved local plans according to a time schedule. It is prohibited for the governorate to finance or execute any development project not mentioned in the approved plans.
- Step 7 The local public council of the governorates with the follow-up authorities examines and evaluates the execution of local plans, and this is achieved in the light of the reports that are submitted periodically by the governorates to their local public councils. This is to ensure the correct and proper execution of the plans in order to meet the necessary needs of the community and to reach the development objectives.
- Step 8 According to the instructions of both the Ministry of Planning and the Ministry of Local Government, and in definite times, the following-up reports of the execution of the plans are submitted to both ministries to be evaluated; and the concerned ministries are asked to offer the necessary help to avoid any problem or delay facing the execution of the plans.

# 1.2.2 Sectorial Planning Process

The sectorial planning process is defined within the frame-work of the national planning process, and dealing with available investments defined by the national plans, besides the available investments on the local level. The sectorial

Planning process aims to achieve a group of production and services projects related to the sector. These projects are in turn distributed to the localities, and then they are executed within the local development plans. The sectorial planning process either in the services sector (public services, housing, and communication) or the production sector (commerce, industry, agriculture) is carried out by one ministry or more according to the responsibilities of the ministries.

#### **1.2.3 Physical Planning Process**

The physical planning process requires the ability to analyse and understand the existing situation in the context of its social, economic and political, as well as its physical and environmental circumstance. The physical planning process has to forecast any changes that are apparent in prevailing trends, and also has to understand the extent to which these changes will affect other aspects of the environment, and judges their desirability; moreover it has to adopt the best strategy and tactics to guide and control any change, and estimates the performance of the chosen strategy and tactics.

The conventional physical planning approach was based on the simple concept of "survey, analysis, plan". It adopts a process with both a beginning and an end. This process resulted in a static and inflexible master plan drawn up in the light of the prevailing circumstances at one particular moment and designed for selected dates in the future. Although there is a five-year review the process proved to be incapable of facing the changing events (5).

Because of the sensitive nature of the planning process and the delicate balance that exists between the various related component parts, the process of planning has to be continuous and has to present no final definite solution. It has to be able to foresee, guide, and influence changes. It also has to be sufficiently adoptable to permit review, modification and revision. Planning is concerned about

<sup>5.</sup> John Radcliffe, an Introduction to Town and Country Planning, Hutchinson Educational, 1974, p. 100.

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the future, but as been said, "It is always wise to look ahead, but difficult to look farther than you can see". The aim, therefore, has to be not to specify in great detail the nature, size and condition of things to come, but rather to establish a procedure or framework that facilitates the manipulation of events in the desired direction. To achieve this end, it is always necessary to clarify at first instance the principal aims of the plan, in other words to define what are the desired social, economic, political and physical directions. This will. Not only provide standards by which the performance of the plan can be judged, but also supply a method of selection from planning alternatives in the first place. (6)

There is a need for continuity, adaptability and revision, to be geared towards the task of producing the best planning decision all the time. The procedure is sometime called "optimization". This can be demonstrated by setting out an example of the interrelated steps involved, one amongst many for there exist various opinions regarding the exact nature of the process and the number of steps summarized as spelled out by McLaughlin:

- Step 1 Appraising or surveying the area, agencies, organizations, individuals and Activities, and identifying the way in which planning might function in the Reform of any imbalance that is present in the locality.
- Step 2 Identifying the overall demands and desires of the community, testing the Political situation and expressing the criteria by which the plan might be Ultimately implemented. From the broad strategies decisions can subsequently be made.
- Step 3 Identifying the planning objectives, this is the more precise way in which the goals might be achieved. The drawing up of both goals and objectives will require extensive consultation and public participation to

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<sup>6.</sup> McLaughlin, J.B., <u>Urban and regional planning: A system approach</u>, Faber and Faber, 1969.

Ensure that all community views and values are fully considered. Moreover, whenever possible they have to be ranked according to the priorities placed upon them by the society that produced them

- Step 4 Examining and choosing the possible alternative strategies and means of achieving these goals and objectives. There might be only one possible "course of action", alternatively there might be many, but in all cases they will be dealing with various constraints, financial, legal, social or political. All component parts that constitute solutions to each objective, which in turn are seen to fulfill a particular goal, have to be analyzed and tested. In. this way a range of potential policies is formulated
- Step 5 Comparing and measuring all the complete courses of action. These evaluation stages are to examine the available procedures. Some strategies will be immediately eliminated being obviously unacceptable for one reason or another. The others might require the use of detailed and sophisticated techniques of selection to choose between them. This could include cost benefit analysis, financial appraisal, or the construction of a goal achievement matrix. This last approach is a reminder that the evaluation has to test and estimate the performance of each respective policy against the goals and objectives already established.
- Step 6 Implementing the chosen plan. This requires positive action on behalf of the planning authority, not only in respect of public development but also in the stimulation of desired private sector enterprise. On the other hand, it requires a large amount of control and regulation over development of a more negative or restrictive nature.

Step 7 Monitoring the plan during its implementing operation to examine the way in which it is working. This "monitoring" stage reviews the performance of the policy regarding its effectiveness and efficiency. Where plan has missed its direction or where changing circumstances have overtaken it, adjustment has to be made

The physical planning process can thus be summarized as a continuous series of steps as follows (Fig. 1.2):

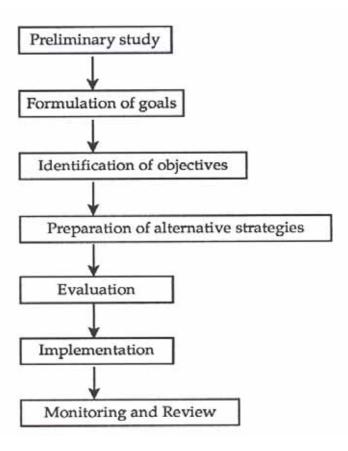


Fig. (1.2) The Physical Planning Process

# 1.2.4 Project Planning Process

Through the national planning process and the sectorial planning process and after setting the physical planning of a given area, the physical planning projects to be implemented in this area are classified in relation to these projects with the economic and social development plans. A study of the planning process of these projects is needed, whether it is related to service section or to production

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Sector, with their different aspects. There should be a study of each project independently as follows:

- Step 1 The kind and the size of the project are defined through location in the five year plan of the sector in which the project is to be implemented. The available investments of the project are defined whether from the five years sartorial plan or/and from other financing sources.
- Step 2 The general policy and the main objectives of the project are set up. This is done through the continuous contact between the owner of the project and its designer. They agree on the general and detailed aims of the project and on the different phases of its implementation.
- Step 3 The designer of the project collects the needed information and data concerning the different elements of the project, defines the required area and space of different land uses, estimates the preliminary costs according to these areas and makes a preliminary feasibility study of the project. Then the areas and requirements of the project are modified in order to cope with the available investments to the project. This is done through the continuous discussions between the owner and the designer of the project to define the final program of the project.
- Step 4 The location of the project is defined and studied within the framework of the physical planning, with the surrounding buildings, its locations and any other factors affecting the project. These factors include the direction of movements toward the project site, a study of the climate and various environmental factors, land topography of the site and the soil characteristics by making soil tests.

Step 5 The preliminary concepts and the general ideas of project design are presented with some alternatives of the architectural design and the Studies of the layout. Each alternative is evaluated in order to choose the most appropriate one to draw the preliminary design of the project. It has to be presented to the owner of the project to approve it and to modify and elaborate it to reach the final architectural design of the project, which has to be also approved by the owner. Then 'the preparation of the working drawings begins, and also the specifications and quantities in order to call the contractors for bidding.

- Step 6 The construction of the project starts after getting the building license and the approval of the different authorities concerned, if required. Usually, the project designer through his construction management section supervises the construction work from the beginning of the construction process until the end of the work and the beginning of using the building. During the construction process the project owner organizes the staff and the working process for using the building efficiently, as so called project management.
- Step 7 The project planning process is not restricted only to the preparation of the design and its implementation but also includes the way of operating and using the building in order to serve its function. This includes defining the project requirements of labour, technicians and administrators. It also includes a special budget for equipping the building, cost of employing and training the project new staff.

The projects planning process can thus be summarized in series of steps as follows (Fig. 1.3):

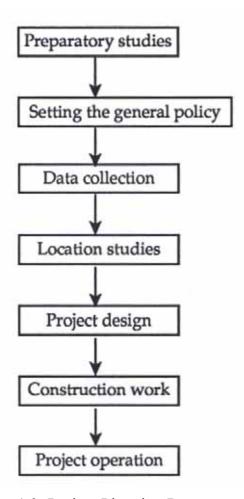


Fig. 1.3: Project Planning Process

# 1.2.5 Organization and Management of the Planning Process

Any national, sectorial, physical or project planning process requires a special management organization for its implementation. This requires linking the planning concept with the administrative and managerial system which helps achieving the plans. Therefore, the administrative and managerial aspects are considered integrated factors in the comprehensive planning process which includes economic, social and physical aspects. The administrative and organization structure to manage any planning process is defined according to the following steps:

Step 1 Setting up the general policy for managing and organizing the planning Process.

Setting up the general and detailed objectives of each phase of the Planning Process and their reflection on the management structure

- Step 3 Defining the different factors affecting the planning process including economic, social, physical or political factors and their reflection on the management of the planning process.
- Step 4 Preparing different options for the implementation steps which fulfill the administrative and organization objectives of the management of the planning process.
- Step 5 Analyzing and evaluating the different options in order to choose the most appropriate one for implementation.
- Step 6 Building up the administration structure with its main section and subsections which will run the planning operation. There should be a range of flexibility in the administrative structure in order to face unexpected and changeable factors which would affect the planning process.
- Step 7 Describing the qualifications and the number of personnel required for the management of the planning process.
- Step 8 Defining the job description for each post in the administrative structure
- Step 9 Building up a special system for controlling and monitoring the Administrative job performance.
- Step 10 Evaluating the performance and the output of the management of the planning process at certain periods and rebuilding the administrative structure in order to cope with the changing and unexpected circumstances which could affect the planning process.

## **1.2.6 Project Execution Process**

Project execution process is the process of designing executing, and controlling a project from inception to completion in a given time, at a given Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

Cost, for a given end product and in accordance with available technical and human resources. (7)

The major stages of a project, together with the various "aspects" which have to be considered during each stage, form the framework of the construction process. These aspects can be divided into four main groups:(8)

- 1. Functional: general concepts, operational patterns, department and room programs.
- 2. Location and site: climate, topography, accessibility, infrastructure, legal formalities.
- 3. Construction: design principles, technical standards, availability of building materials, building methods, safety of operations.
- 4. Operational: project administration, cash flow, maintenance needs, operational safety and health.

The examination of each aspect has to start during the first stage of the construction process and continues in greater details during the subsequent stages until each one has been dealt with. The construction process could be divided into five stages: briefing, designing, tendering, constructing and commissioning stages. The purpose of each stage is as follows (Fig. 1.4):

- **1.** *Briefing stage:* to enable the client to specify project functions and allowable costs, so that the architects, engineers, quantity surveyors and other members of the design team can correctly interpret his wishes and provide cost estimates.
- **2.** *Designing stage:* to complete the project brief and determine the layout, design, methods of construction and estimated costs, in order to obtain the necessary approvals from the client and authorities involved, also to prepare

<sup>7.</sup> A lecturer by: Dr. Abdel-Hady Housny, Professor at Civil Engineering Department, Ain Shams University, On: <u>Planning. Designing and Managing:</u> <u>Housing Projects, Center for planning and architecture studies, 1990.</u>

<sup>8.</sup> Prof. Dr. Gamal El-Din Nasser, <u>General Management in Construction:</u> <u>Projects,</u> unpublished paper, 1990.

The necessary production information, including working drawings and specifications and to complete all arrangements for obtaining tenders.

- **3.** *Tendering stage:* to appoint a building contractor, or a number of contractors, who will undertake the site construction work?
- **4.** *Constructing stage:* to construct the building within the agreed limits of cost And time, and to specified quality.
- **5.** *Commissioning stage:* to ensure that the building has been completed as specified in the contract documents and that all the facilities work properly. To provide also a record of the actual construction, together with operating instruction and to train staff in the use of the facilities provided.

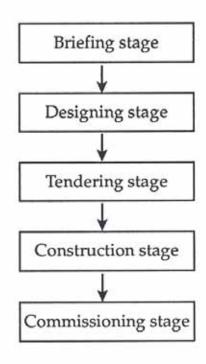


Fig. (1.4) the construction process.

## 1.3 Types of Management

## 1.3.1 Definition of Management

Management is such a broad and general concept that precise definitions are impossible. Alan W. Steiss refers to management as: "the art of getting thing done", involving "the direction, co-ordination, and control of resources to achieve some purpose or objective"(9). Also Michael J. Munson describes management as that "which keeps to various activities of the organization co-ordinate and continuously striving towards fulfillment of the organization's internal and external purposes"(10).

Management can be looked at as a decision process or as an activity. As a decision process Munson stated that "the management function will consist of decision determining what the organization's purposes are, what the organization is going to do to fulfill those purposes, how the organization is going to do these things, and who in the organization is going to do them"(11).

For management as an activity, the classic definition is still held to be of that of *Henri Fayol* (1916) "To manage is to forecast and plan, to organize, to command, to coordinate and to control" (12). This general statement about management still remains valid after fifty years and has been adopted by more other writers. *Koontz and O'Donnell* (1976) defined management as: "Managing is an operational process initially best dissected (explored) by analyzing the managerial functions",

<sup>9.</sup> Alan W. Steiss, <u>Public Budgeting and Management</u>, Laxington Mass, Health, 1972, p: 1.

<sup>10.</sup> Michael J. Munson, "How to keep plans off the shelf: An Organizational view of Planning. Management and Implementation" Ph. D. dissertation, University of Michigan, 1972, p.: 14.

<sup>11.</sup> Ibid.

<sup>12.</sup> Henri Fayol, <u>General and Industrial Management</u>, Trans. Constance Stones (New York: Pitman, 1949), p: 14.

"The five essential managerial functions are: planning, organizing, staffing, directing leading and controlling" (13) - (Fig. 1.5).

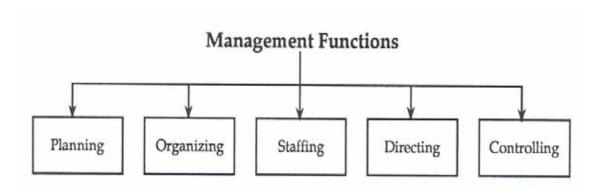


Fig. 1.5.: The main managerial functions.

So management can be defined as dealing with people to determine, interpret, and achieve organizational objectives by performing the functions of planning, organizing, staffing, leading and controlling. (14)

It is common to use the word administration instead of management, but sometimes it becomes confusing. Public administration is best defined by Linder berg and Crosby (15). "It is the attempt to elect co-operative action to implement government policy in an uncertain environment where divergent subgroups both in and outside the organization may have widely different objectives".

The difference between management and administration is that management is used by those who actively try to achieve development objectives, while administration is used by those who consider their job as a source of income and influence.

<sup>13.</sup> G.A. Cole, <u>Management: Theory and Practice</u>, DP Publications ltd., 1984, p: 5.

<sup>14.</sup> Leon C. Megginson and others, <u>Management. Concepts and Applications.</u> Harper and Row, New York, 1986, p.: 6.

<sup>15.</sup> Linder berg, M. and Crosby D, <u>Managing Development the political Dimension</u>, 1981.

## 1.3.2 Management of Development

The management of the development process includes the ways and means by which the development process is completed, whether it is economic, social or physical development. It also includes the machinery which is assigned to implement or apply the development process. This machinery includes the administrative structure and the job description for the different posts working in the implementation of the process. Moreover, it includes the manuals which assist the staff in performing and developing the administrative, technical, financial, and legal and the informative aspects carried out within the administrative structure.

The management of the development process includes the ways and means of data collection, classification, storing and recalling. It also includes means of preparing preliminary concepts of development in its national, regional and local frames, or even within its sectorial frames whether services or production. Moreover, it includes defining available financing resources, the kinds of investment projects and their economic feasibility studies. Besides, management of the development process covers means of preparing development options, evaluating and choosing the appropriate option within the economic, social and environmental constraints. It also covers the means of follow-up, evaluating and the upgrading of performance in order to increase the productivity of the development process to the maximum.

In short, the management of the development process aims at the upgrading of the performance level of all those who are involved in the development process. This is achieved by the definition of assignments, job description and the provision of manuals which include the guide lines which help the upgrading of performance level in the administrative, technical, legal and financial aspects. The management of the development process varies from one country to the other according to its economic, social and political status.

## 1.3.3 Urban Management

There is no universal model for urban management. Development strategies and institutional arrangements for human settlements have to respond to specific political structures and to changing needs and opportunities. Urban management methods for new towns in developing countries have to be continuously adjusted to match capacities and constraints. It has to be a development operation rather than a simple project with an end.

Urban management can either be defined as a field of study or as an activity. As a field of study the United Nation Center for Human Settlements definition is useful (16) "In the human settlement context management means the whole complex of actions involved in planning, programming, budgeting, developing, operating and maintaining a settlement (Fig. 1.6).

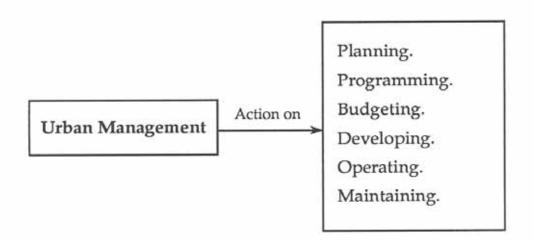


Fig. 1.6.: Management as a Field of Study.

<sup>16.</sup> United Nations Center for Human Settlement (Habitat), Global Report on Human Settlements, 1986, Oxford University Press, 1987, p: 99.

Management as an activity is defined as: "Urban management is the activity of attempting to mobilize diverse resources to work in a co-operative manner in the fields of planning, programming and budgeting development and operation and maintenance of settlement in order to achieve the development objectives of the government" (17) - (Fig. 1.7).

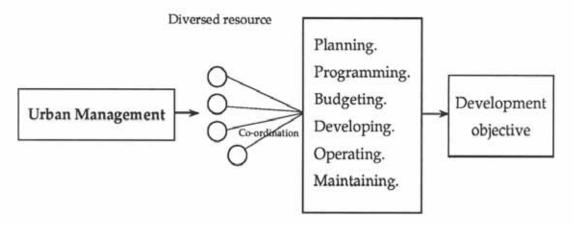


Fig. 1.7: Management as an Activity.

## 1.3.4 Physical Planning Management

The management of the physical planning process includes setting the administrative and managerial policies which help upgrading the performance of preparing physical planning and their implementation policy. This is done through certain steps starting with physical data collection, storing, recalling and up-dating them. It also includes the steps for preparing directive and detailed plans in the form of options to be analyzed and evaluated in order to choose the appropriate one. Moreover it includes the ways and means of decision making for implementing the physical project, estimating their investment and its financing capabilities, and also, means of supervising, following up and evaluating the implementation process. This is beside the research work which the management of the physical planning requires in order to solve national and local problems or to define Planning and design criteria and to put all the activities of the different components of the physical planning in manuals.

<sup>17.</sup> Forbes Davidson, <u>Settlement planning and urban management</u>, unpublished Paper, Institute for Housing Studies, Rotterdam, 1989.

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The management of the physical planning process includes also the upgrading of the urban and rural environment, and setting up the new settlements planning and means of managing its development within their national and regional context. The management of the physical planning process is carried out within the frame work of the rules and regulations which define the objectives regulate the actions and specify the responsibilities of the planning authorities. It also specifies the administrative structure, job description, develops job performance and upgrades the staff skills in the planning authorities. Besides, it sets up the organization and managerial framework of technical, financial, legal and administrative aspects for the physical planning authorities. The management of the physical planning process differs from one country to the other according to its political, economic and social policy.

## 1.3.5 Project Management

Project management aims to define the ways and means of estimating the size and the kind of the project, its location and its economic feasibility within the national, regional and local framework. It includes setting the administrative and managerial system required for the project operation whether in the service or productive sector. The project management covers the job description for the suitable staff required for the different project phases: planning, design, implementation, operation, maintenance and then restoring. It also includes means of follow-up, evaluation and modification of the project process, covering its technical, administrative, financial and legal aspects.

The project management in general aims at developing the level of Performance in the project process through providing instruction, training, research, marketing studies and the management of investments within the rules and regulations applied. The nature of the project management differs from one Activity to the other, service or production.

It also differs according to the prevailing rules and policies, size of the project and its location. The project management on the other hand is affected by the available labour skills, the role of community participation, building materials and the construction system.

## 1.3.6 Housing Management

The art of housing management makes the difference between maintaining and improving a structure or permitting deterioration of the building. In short, proper management creates a better living environment.

Policy is not made by the housing management; it rather executes the policy established by its employer: a housing authority, a housing company or an individual owner.

The housing management transmits its ideas to designers and engineers. It attends to the fiscal well-being of the development with the assistance of its administrative staff. With the aid of the maintenance staff, the housing management cares for the physical condition of the dwelling, mechanical installations and the structure. It makes an effort to attain the social betterment of residents through education, human relations and the stimulation of tenant participation in programs.

In summary, the effective housing management considers the skillful control of man, material and money to achieve a well-maintained and desirable housing environment. It deals not only with efficiency and economy, but equally with questions of ethics and humanism. (18)

Housing management, prior to housing occupancy, deals with the relocation of families, selection of occupants and pre-occupancy education of families. Housing management assists the housing designer and promotes financial Assistance.

<sup>18.</sup> Department of Economic and Social Affairs, <u>Basics of Housing Management</u>, United Nations, New York, 1969, p: 1.

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Housing management covers office layout and needs, maintenance shop and its organization, staff. Requirements and financial matters and purchasing. Moreover, it insures the satisfactory completion of construction, puts the final details prior to occupancy.

Housing management, after occupancy, organizes the office administration which deals with budgets, controls, policies, standards and norms, files and forms, insurance, the purchase and use of equipments and materials, and personnel. Housing management deals also with the collection of maximum income which includes the down payments, security deposits, collection of rent, subsides, and managing services to residents. Moreover, housing management deals with maintenance of property by establishing the maintenance office and organizing day-to-day maintenance, seasonal and preventive maintenance, and safety programs.

## 1.3.7 Construction Management

Construction management is defined as "It is that group of management activities, over and above normal architectural and engineering services, related to a construction program-carried out during the predesign, design, and construction phases-that contributes to the control of time and cost in the construction of a new facility". (19)

Construction management aims to apply knowledge of construction techniques, conditions and costs to the three phases of decision, design and delivery of a project.

Construction management could be described as developing in two phases. The first, construction consultation during design development, provides information about cost and construction method coping with the objectives of the budget. It also clarifies the time and cost consequences of decision and designs Options as they occur.

<sup>19.</sup> George T. Heery, <u>Time. Cost and Architecture</u>, McGraw-HiII, 1975 Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

The second is construction management by which various contractual components of the project are assembled, sequenced and related to the cash flow. This includes construction scheduling, prepurchasing of important materials, advising on the method of obtaining contractors and awarding contracts. It also includes co-ordination and direction of all construction activities, including those of the producers of systems and sub-systems. (20)

<sup>20.</sup> William B. Foxhole, <u>Professional Construction Management and Project Administration</u>, Architectural Record Books and the American Institute of Architects, 1976, p: 6-9.

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## 1.4. The Change of Planning Concepts

# 1.4.1 The Transformation of Physical Plans into Operational Process

The conventional physical plans, fashioned in Egypt in the 1960s and 1970s, by foreign consultants, was to serve as the basis for the control of physical growth and change. Conventional physical plan has consequently produced solutions to urban problems that are predominantly physical in character, such as land-use maps, and zoning, density controls, building regulations and planning standards. (21)

However, the occasion for formulating a new urban development operation presents an opportunity to move away from old fashioned physical planning, to a process which addresses the most urgent issues in new urban settlements. The transition itself requires preparation which calculates means, ends and resources. It is itself an act of planning, and arranging institutional change. The instrument for realizing the new administrative procedures and institutional formation required is an extensive program of project oriented training-while-doing. Fig. (1.8).

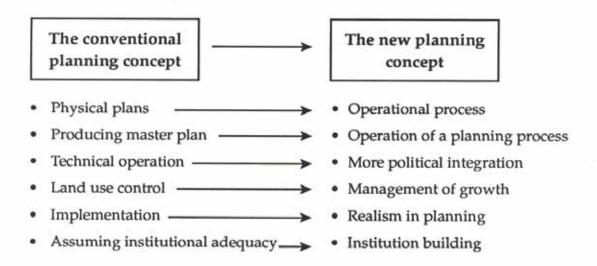


Fig. (1.8) The change of planning concepts

<sup>21.</sup> John Radcliffe, <u>an Introduction to Town and Country Planning:</u> Hutchinson Educational, 1974, p: 10.

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The city planning is currently aimed at the problems arising from the way land is used, at housing conditions, at the structure of the road network, and at the appearance of buildings. In widening its scope beyond physical change to both social and economic development, a different approach to urban planning would treat new subjects as well as treat old ones in new and different ways. For example, transport would include traffic management along with road construction or upgrading.

A degree of programming would be essential to select an agenda of priority matters which the available skills and manpower could handle. The range of choices would be greater than before, and the focus of each subject would shift to economic and social development effects. A development agenda would select priorities from the following matters at least: the city relationship to national and regional policies, economic development and employment, housing, utilities, transport social services, the environment, and land. This is not an unusual list in terms of current views of urban planning, but it goes well beyond the scope of the town planning in practice in urban settlements. (22)

# **1.4.2** The Change from Producing Master Plan to the Operation of a Planning Process

The present master plan concept was the product of traditional town planning method. For a period of time, physical conditions were surveyed and analyzed. Then planning proposals were formulated to attack professionally defined problems. A report on all of these actions was drafted and put to government as the master plan, so that government might comment upon it and eventually accept its recommendations with modifications. As with most of its kind, the plan was not produced by the normal day-to-day activity of the usual work Force.

<sup>22.</sup> Michael Mattingly, <u>From Town Plan nine to Development Planning: A Transition through Training</u>, Habitat Intil. Voi. 12, No. 2, 1980, pp: 97-109. Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

Additional and special skills were temporarily hired in and given responsibility.

Instead of a single plan-making effort, the new approach would conduct the operations of planning continuously and constantly, using staff normally available. It would regularly turn back upon itself to reassess and change its working premises. It would respond to assessments of why current policies succeed or fail. It would address new issues and drop old ones as changing conditions and political priorities suggest what is most relevant. It would improve its judgment and technical capability by learning from experience. And it would regularly supply the decision-making process of government with its product: data, analyses and forecasts, recommendations for action, and evaluation of policy effects.

Regular repetition of the tasks of planning would systematically improve the quality of its product. Earlier assumptions would be changed where they proved false, and more general proposals would be changed where they proved unworkable in detail.

Also, frequent repetitions of planning tasks in cycles would suit government's need for a responsive planning activity. Often decision makers must have analyses of problems or suggestions for solutions without waiting for a lengthy process of careful consideration to be carried out. Frequent repetitions of work would refine and even change tentative (experimental) conclusions, while they are being used in reaching decisions.

# 1.4.3 The Change from Technical Operation to More Political Integration

At present in urban settlements, land development planning is a technical function, directed by a senior town planning officer and his department superiors. Other heads of departments organize their own future actions, each according to his own view of objectives and priorities.

It is very likely that major weaknesses of the existing plan are seen as failures of the professional skills and knowledge employed in its formulation and in efforts to control and co-ordinate the actions of others.

By contrast, development planning, with its concern to coordinate and advise all significant actions of government, would acknowledge that it is dealing with competing claims for public resources and the regulation of private action. As such, it has little strength except that given it by the political process of government.

Consequently, development planning requires the collective supervision and backing of the senior decision-makers. It requires a place in the administration closer to political decision-making, a place from which it could directly advice all those whose agencies spend money, and as well those who give overall direction to government efforts.

Much more is needed than a higher place in the structure of government. The present physical plan is a structure of judgments based on subjective values. These values are formulated by planners whose decision is based on professional training and technical experience. To make matters worse, the planners of the current plan were, sometime, foreigners. It is likely that many plans, of what might have at first been prized as objective judgments, have been found to be the expression of foreign values to the political,. Economy and culture of the city.

Values are involved not only in choices of what to do (e.g. goals, objectives, and standards) but also in how to do it. The political feasibility of proposals cannot be judged by technical professionals alone, no matter how highly trained, working in the isolation of a lower level of the administration. It has long been argued that successful planning must be responsive to political values, whether following them, informing them, or challenging them. The new approach to urban planning has to have a place in the top level decision-makers, if it is to be aware of political choices and intentions, understanding and acceptance of those political leaders who make things happen in the city.

# 1.4.4 The Change from Land Use Control to Management of Growth

The generally recognized planning function for urban settlements is that called town planning. It is performed by a single unit located within a department in the local authority. It is best known for its development control operation guided by the master plan for land use. Little effort appears to be given to update and refine the master plan's image of the future. Instead a constant battle is fought for the achievement of standard in day-to-day requests for permission to build.

Meanwhile, other departments of local and national government conduct their own planning functions for the city. One will program the future construction of housing; another will arrange the building of new roads. Or several may cooperate to implement a squatter upgrading project. Their undertakings are neither comprehensive nor coordinated in their attack on priority problems.

Development planning for the city, by contrast, would be a team effort involving the key planning and development officers from a wide variety of government departments. These would be the institutions whose actions affect the city's growth, whether building roads or providing medical care. Instead of creating another master plan, the team would conduct a service able to advise decision makers from day to day about the future consequences of their possible actions.

The tasks of diagnosing problems and formulating strategies would be carried out continually, as' changing conditions and as re assessments of the judgments and the assumptions of plans call for changes in local authority responses. An inflexible plan would not do. Controls on private sector, changes to land use and buildings would continue. But of equal importance would be the planning of capital expenditures of government, so that these investments would do as much as possible to achieve the intention of policy. In this way, development

Planning would initiate planned action and act as a stimulant to the investments of national government and of the private sector. Emphasis would shift from passive control of the private sector use of land to active leadership and co-ordination of major investments coming from all quarters.

Planning would thus become a part of government's effort to manage the whole of the urban growth process, so as to bring about not only better physical conditions but also progress in relation to the entire agenda of development problems and opportunities, including economic growth and social change. This could be achieved by the following actions:

- 1. It would have a place in government alongside maintenance and operations, the other main components of management.
- 2. To achieve this role urban development planning would have to include urban Economists, financial experts and administrators in its core team.
- 3. It would have to be located differently in the structure of government, not a section within a single purpose department, but an office directly connected to the highest level of the city council where an overall management perspective is taken.

Achievement of each of the three changes, discussed previously, would do much to combine town planning with the separate planning efforts of the many agencies building the city. It would thus raise the whole to the status of a proper management function.

# 1.4.5 The Change from Implementation to Realism in Planning

Implementation would be a concern throughout the process of planning. It would not be an additional step, tacked on to the process, to achieve plans formulated without due consideration of their possibilities for implementation. This alternative planning approach would take steps from the beginning to improve the ability of the resulting recommendations to be implemented, rather than designing programs of implementation after proposals are made.

Each of the major tasks of planning has at least one dimension which Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

greatly affects the possibilities for implementing recommendations.

Consequently, each would be performed to obtain the most favorable effect. In this way, the entire function of plan making would aim at action. For example, it would fix upon matters which are of the greatest concern to those who shape the growth of the city. In partnership with various government agencies and through a constant dialogue with senior administrators, it would identify and analyze what are likely to be the future conditions in the city. Possibilities for proposals would be discussed throughout local authority as they are developed, in order to keep them relevant, their expected effects acceptable, and their resource requirements within supportable limits. Strategies and actions would be detailed, identifying who would carry them out, at what time, in co-operation with whom, and using what powers and resources. Since political support and resources must be mobilized and administrative capacities strengthened as prerequests for successful implementation, additional strategies and actions would have to be formulated to achieve these prerequisites.

Thus the new approach, as Michael Mattingly put it (23), would examine problems which interest the local authority. It would explore the reasons why current policies succeed or fail. When meeting impossible obstacle, unlikely conclusions, or insufficient support it would turn back upon itself to reassess and change its working premises. It would exchange comments and suggestions with decisions makers to test the suitability of its lines of formulation and the suitability of its proposals. It would undertake realistic evaluation of the implementation possibilities created by the nation's political economy, the city's administrative capacity, and available resources. Its multi disciplinary and its closer relationship to centers of power would help doing so easier. It would put in details proposals as realistic programs of projects and actions. This would allow responsibilities for their execution to be matched to available institutions, revealing where institutional

<sup>23.</sup> Ibid.

Capacity is weak or altogether absent. This would also reveal proposals which are unworkable because their detailed requirements cannot be satisfied.

# 1.4.6 The Change from Assuming Institutional Adequacy to Institution Building

Traditional town planning has been trying to work with existing situation. This alternative planning approach would recognize that the current apparatus of local authority has its limitations. It would attempt to change the institutional capacity of local authority to act. When policies are expressed as strategies and then broken down into separate tasks, the performance of these tasks cannot be expected unless each can be matched to an entity capable of taking the necessary actions.

Much has been said about institutional development as a prerequisite to proper urban growth in the Third World. This discussion usually falls short in relation to planning. While emphasizing building the technical capability of government departments to deliver goods and services, too often it seems to be forgotten that these individual actions are the end product of larger strategies. That being so, the way goods and services are delivered can be as important as their actual delivery. To this end, institutions can be given greater capacities to act as participants in a team, rather than as individuals. They can be inspired with purposes which are beyond their normal operational and maintenance objectives. This may reduce their natural desire to resist change and protect their self-interests to an extreme.

Institution-building and institutional change aiming to go thus much further require strategies to develop an appreciation of (1) the objectives of larger plans and (2) the benefit of actions taken in co-ordination and co-operation with others. This means strategies to do more than just develop certain skills in an institution and obtain greater manpower, funds, and administrative powers for them. It means building the institution's capacity to work together with others, and to do so in new and different ways.

It means increasing the institution's participation in formulating complex, interrelated and future-oriented sets of actions, which are the products of planning. It also means building new institutions at a higher level to implement planning from the top down.

Development planning would first formulate proposals with current institutional abilities in mind, weighing the legal, financial and manpower resources available against the requirements of programs of actions. Then, it would recommend actions which might enlarge the limits of public sector action, calling for training, new means of raising revenues, or the like. But more than this, it would bring together in new relationships all parties in government which affect the city's growth and change, sometimes creating new institutions.

This would bring about the evolution of improvements to operations and to the organization of local authority. Key actions for changes would be the institution-building and project-related training programs operated for planning and administrative staff throughout the structure of local authority. Where training would introduce new and better skills, it would also introduce a corporate planning manner. It would introduce new modes of operation and new working relationships for all to experience. Training here is identified as an element of the new approach to planning, to be used continually to make planning work.

# 1.4.7 Correlation between Planning and Management

In preparing any urban planning project available implementation process has to be taken into consideration. On the other side, in choosing the appropriate implementation process the available management system has to be taken into consideration. So urban planning projects have to be prepared according to available implementation process which will execute the planning and transfer it into reality, and also according to available management system, which will organize, manage and control the implementation process to satisfy the urban planning objectives.

Any disarrangement in the management aspects will reflect on the implementation aspects and therefore it will cause delay in reaching the planning objectives according to schedule. So there have to be an effective coordination and strong relationship between urban planning process and implementation and the management system.

A management system is an interrelated group of decision processes, the planning function is an integral part of the management system, not a separate element. The elements of the management system can be described as broad categories of tasks. Munson uses the following categories. (24)

- 1. Strategic planning involves the formulation of overall goals and objectives and the selection of policies that apply to the acquisition and expenditure of resources.
- 2. Management planning involves the formulation of programs of activities that are designed to accomplish goals and objectives within policy constraints.
- 3. Operational control involves the conduct of specific program tasks in order to affect objectives.

The accompanying figure shows these three categories grouped into a conceptual functional hierarchy (not an organizational chart) (Fig. 1.9).

Strategic planning involves determining goals, objectives and policies for the local authority. Once determined, these are passed on to the management planning unit. This is not to say that management planning has no effect on the formulation of goals and policies. Alternate goals and policies may originate at any level, but the decisions are made at the strategic planning level. Specific individuals in the organization may have responsibilities in several of the functional categories. For example, a mayor might sit with the city council for strategic decisions while serving as chief administrative officer for management planning decisions.

<sup>24.</sup> Michael J. Munson, "How to keep plans off the shelf. An organizational view of Planning. Management and Implementation". Ph. D. dissertation, University of Michigan, 1972, p. 14.

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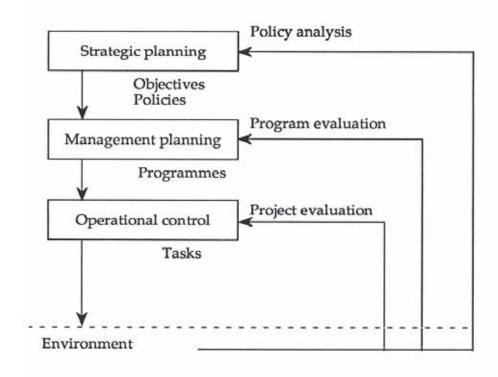


Fig. 1.9: The Management System.

Management planning involves selecting the operations that will be required to accomplish the objectives and policies of the local authority. The output of management planning is essentially a plan of programs to be implemented. The operational control function translates the programs into a series of task and then implements the tasks. Ideally, these tasks result in the achievement of the goals and objectives of the local authority.(25) - (Fig. 1.10)

The process of management is continuous. Changes occur in the environment because of the effects of the organization's activities and because of other external factors. The local authority should continuously evaluate the changing of the environment to suitably alter its goals, objectives, policies, programs and tasks. For example, a city may be organized so that the strategic planning function is the responsibility of the city council, the management planning function falls on the city manager and his planning staff, and operational control rests with other Departments.

<sup>25.</sup> Anthony J. Cantonese and James C. Snyder, <u>Introduction to Urban Planning</u>, McGraw-HiII Book Company, 1979, 1" 322.

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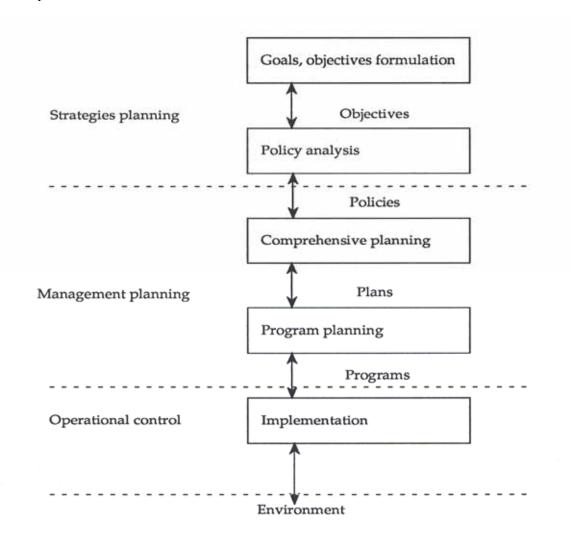


Fig. 1.10.: The Planning System

The city council continually evaluates the city environment to identify problems. Often these problems are issues brought to light by individuals or groups in the environment or within the management system

Evaluation is essential to the continuous process of management. The results of the evaluation of policies, programs, and operational tasks allow for a new round of decision making. Has the problem been solved? If not, how has it been affected? Should policies, programs, and/or tasks be altered? Are more resources required? This process of incremental, continuous adjustment of the organization is management. (26)

<sup>26.</sup> Ibid.

### 1.5 Conclusion

From the above mentioned definition a conclusion could be drawn in the following points:

- 1. The management of the planning process should be oriented towards the organization of integrated development including economic, social and physical aspects in their national, regional and local context.
- 2. The organization of the development process should include the act of training while doing.
- 3. Physical planning should be transferred into an operation process. This means that the master plan concept has to be changed to an operational planning action.
- 4. The technical professional approach of planning has to be transferred into a more political integrated manner.
- 5. The concept of land use control should be modified to the management Operation of urban growth.
- 6. Designing programs for implementation has to be taken into consideration from the beginning of the development operation.
- 7. The approach of building institutional adequacy should be oriented towards Institution building to cope with the continuity of the development operation.

# Chapter Two: Theory and Practice of Urban Development Management in New Towns

## 2.1 The Conventional Planning Process of New Towns

- 2.1.1. Defining the goals and objectives of new towns.
- 2.1.2. Feasibility study of new towns.
- 2.1.3. Site selection of new towns.
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- 2.4.8. Lessons from the new town experience in England.

# 2 THEORY AND PRACTICE IN THE MANAGEMENT OF URBAN DEVELOPMENT OF NEW TOWNS

## 2.1 The Conventional Planning Process of New towns

# 2.1.1 Defining the Goals and Objectives of New Town

Goals and objectives of new towns have to be defined by a planner (developer) with respect to the National Development policy and to the new town authority. The planner has to set primary goals and objectives based on the variety of problems which the new town has to solve. These goals and objectives have to be evaluated and continuously redefined. Even after setting the development plans, goals would be revised, if necessary, since parts of the goals may change though its fundamental idea has not.(1)

The goals and objectives of a new town differ according to its location in the national and regional development plans, country political system, the economic situation, social structure, and other environmental conditions. Goals and objectives have to cope with the main function of new town whether it is to resettle the spill out of population from overcrowded areas, or to develop areas with few potentialities, or for defensive requirement, or to serve other political and social requirements. Also, goals and objectives of a new town have to match with its economical base whether it is industrial, agricultural, commercial, touristic or service or a mix of some or all of them

New towns are expected to achieve, some or all of, the following basic goals and objectives:

- 1. Strengthening a sense of community among resettlers.
- 2. Developing maximum community participation in all phases of the development operation beginning with decision making.
- Providing high-standard of required utilities, infrastructure, and social, educational, health, and welfare services that the community needs, or manages their delivery.

<sup>1.</sup> Gideon Golany, <u>New-Town Planning: Principles and Practice</u>, A Wiley-Intersceince Publication, 1976, p: 250.

4. Providing equal access of residents to all services, utilities, and infrastructure.

- 5. Establishing a tax system in existing urban areas to support provision of services, retain effective land-use control, and protect the public and private interest in the new town.
- 6. Implementing comprehensive management system for community development and establish a strategy for co-ordinated control of the development to protect public needs and private rights.
- 7. Developing and enhance the natural environment and provide a positive social climate for the satisfaction of residents.
- 8. Providing equal employment opportunities for all residents.
- 9. Providing and developing incentives for residents in new towns and obstacles for residents in existing urban areas.

## 2.1.2 Feasibility Study of New Towns

After defining the goals and objectives of a new town a primary feasibility study has to be done to estimate the possibilities of the new town success, before investing more money and time in detailed feasibility study. This has to be done by determining the economic, social, physical and environmental possibilities of the new town project. And, also by considering potential problems related to population, physical; surroundings and economic base, as each affects the new town goals.

The primary feasibility study has to be followed by a more detailed study of the selected site. This study has to deal with the site location within the regional context, its connection with the transportation network, available development motivation, and develop incentives for both resettlers and investors. Also, the study has to deal with the cost-benefit analysis, available financial support, available building materials, and appropriate building technology. The detailed feasibility study has to be based on the data collected for different social, economic and physical aspects of the new town. This study is an important guide to the private developer so that he can determine the feasibility of his investment project. On the

Other hand, the public developer could see the new town as part of a national or regional policy for urban growth, which alters the measurement of feasibility.

### 2.1.3 Site Selection of New Towns

New towns sites have to be selected according to a defined criteria which satisfy the socio-economic and physical requirements of the resettlers. Since the economic base of new towns is crucial for its development, so site selection for industry has to be comprehensive and according to the following criteria:

- 1. Physical conditions: topography, land suitability, access to it, availability of sewage, water supply, electric power, and its climate.
- 2. Availability of labour force and their skill level.
- 3. Rules and regulations organizing different economic and physical aspects in the site, including the taxation system.
- 4. Incentives for investors and labors to resettle in the site.
- 5. The transportation network, its frequency condition, and access to the site.
- 6. The distance between the site and markets or consumers.

A site far from centers or populated areas may require public incentives or subsidies for industry, since it has to compete with other industries located near urban centers. Moreover, site selection for housing resettlers has to be done according to availability of building materials, natural resources for development, availability of economic water supply system and high-voltage electric lines, soil characteristics, and other environmental conditions.

# 2.1.4 Formation of New - Town Development Corporation

A development corporation has to be a primary agency responsible for initiating and constructing the new town. It could be owned by the private or public sector or a joint venture of the two. The role of the development corporation has to be as follows: (2)

<sup>2.</sup> Frank Schaffer, <u>the New Town Story,</u> Granada Publication Limited, 1972, P: 53.

1. Defining a development strategy, and putting the site planning according to the new town objective.

- 2. Coordinating its work with different parties involved in the development process.
- 3. Developing the plans and implementing them.
- 4. Supervising the construction process.
- 5. Delivering major social services and public utilities required by the new town until a local government is established.
- 6. Managing all financial aspects of the project.

To achieve its role, the development corporation has to manage its own work with less restriction from the central government, and to enjoy more freedom and flexibility in dealing with different unexpected situations facing the development process.

The development corporation structure could be constituted of four bodies.

## 1. The Planning Team

The planning teams have to be composed of, some or all, such professionals as planners, urban designers, architects, sociologists, economists, geographers, geologists, anthropologists, ecologists, housing public, health experts, political scientists, transportation experts, and computer programmer. This team has to constantly evaluate and revise the economic, social and physical aspects of the development process.

## 2. The Community Advisory Committee

At the beginning of the development process, members of this committee would be people from the region and participants who are interested in the new town development project and willing to share their experience with the development corporation. During the development process, when people are being resettled in the site they would become members in the committee. Those members are better to be from resettlers experienced in daily urban life, such as

Educators, journalists, doctors, psychologists, philosophers, religious leaders, policemen, drivers, and local leaders presenting different professional groups.

The role of the community advisory committee is to contribute positively and actively in the development process by its valuable ideas and experience, and to participate in consultation and decisions concerning its new town. Also, it may encourage new local community leaders, construct a local governing body, and improve the new-town conditions.

## 3. The Directing Board

The majority of Directing Board members are of the land owners and investors, with the advisory committee representatives and the planning team representatives. The role of the Directing Board is to guide and control the development process of the new town, and to manage its social, economic and physical aspects, with respect to the community, and the planning team ideas and needs. Moreover, it is responsible for supervising the construction and maintenance work, and the delivery of services. This board will disband when the new town establishes its own government and the plans have been implemented.

## 4. The Construction Agency

This agency has to be appointed by the directing board to construct the new town plans approved by the board. This agency should have the appropriate equipment and skilled staff to implement the plans and to maintain them. The construction agency may remain in existence even after the establishment of the new-town government, to continue the implementation of the plan and to maintain those properties still owned by the development corporation.

### 2.1.5 New - Town Governmental Structure

After the development corporation implements the new town and ends its role in the development process, the authority of the new town has to be Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

Transferred to the existing governmental structure of the country. The conventional governmental structure could deal, efficiently with existing communities in old established urban areas. But, it would be difficult for the conventional system to deal with new towns since it is in an unstable situation due to unexpected changes affecting its development. So it would be better to reform the existing governmental structure and adopt a comprehensive one which can deal with the new situation.

It would be difficult to reform established governance since it is enforced by existing rigid rules, bureaucratic legislations, and complicated relationships between different organizations. Therefore, it would take time, effort, and political manipulation to change. Moreover, as changing the existing governance will take a long time to be achieved, when it is finally completed it would be either too late or would require further changes.

Developing new towns would be a good opportunity to reform governmental structure since there is no past commitments and the community would accept any changes easily. Also, the dynamic and changeable characteristics of the new town require flexible and operational managing structure.

There are various basic forms of governance for a new town and the planner has to review them, select and adopt the best alternative to his own situation. Selecting the new form of governance has to be done according to the site location within the region, political and decision making system, type of community organization, local governmental structure and available administration and management capabilities for the new governance.

The several possible forms to manage a new town, as Gideon Golany puts them, are: (3)

<sup>3.</sup> Gideon Golonay, New Town Planning: Principles and Practice, A Wiley Interscine Publication, 1976, p: 250.

- 1. Independent incorporation.
- 2. Annexation.
- 3. Public agency.
- 4. Homes association,
- 5. Special service district.

## 1. Independent Incorporation

The independent incorporation has to establish an autonomous body given the power and support by the central government to implement standard living conditions for the community in its defined location. This incorporation would deal effectively with the new town development as it is based on a well structured legislative procedure. The incorporation boards have to be chosen by democratic process, either through traditional electoral process or decentralized structure throughout the community. So, there has to be a great impact of community participation in that process, to give them the opportunity to reform and innovate the incorporation system in its early years.

On the contrary, the incorporation requires a certain size of population with a strong economic base, and a degree of community awareness to function effectively. This could not be always found in the early steps of the new town development.

## 2. Annexation to an Existing Municipality

When the new town site is located within the boundaries of a municipal zone, which is economically dominant, it would be subject to annexation. It would be difficult for the new town to have its own identity and to define its goals without respect to the municipality goals and its community needs. The annexation has to be planned carefully to avoid the new town losing its plans and its social identity.

Also, when the new town site is located outside the municipality boundaries, but inside the boundaries of a county, the new town would be subject to annexation by the region. In both cases, the role of the new town in providing services, job Opportunities and standard living conditions would extend and

include not only the new town zone, but also the municipality and/or the region boundaries. So the level of services provided in the new town would be equal or superior of those already existing in the region. The new town would become a part or an extension to the existing region and/or municipality, and not as a separate attracting resettling new town.

## 3. Public Agency

The role of the public agency, which has to be appointed by the central government, is to manage the municipal functions for the new town from its origin until its maturity. The new town could be considered mature when the number of resettlers can manage self government, and has capable local leadership. At that time, an election of local government council could be held to take over the management of the new town. As the major responsibility for new town construction is a government function, the public agency would be more efficient in dealing with it.

The central government has to subsidize most local services, building materials and infrastructure. Also it has to elect a steering committee to manage the municipal functions of the new town, and to implement government policies. This could be done through a body such as the Ministry of Reconstruction, in the central government. Members of this committee would be representatives of different organizations dealing with the new town, local leadership, and other experts in various fields concerning the new town development such as urban affairs, financial control, social affairs, development management and administration affairs.

The public agency has to satisfy the resettle's needs and interests, with respect to the central government's policies, by developing and maintaining standard public utilities and necessary services and infrastructure. Also, it could be allowed to construct necessary services for the region when this is economically feasible. The public agency could accomplish its role through the legislative power and the legislative power and technical support gained from the central government

#### 4. Home Association

Home association could be defined as "incorporated non-profit organizations operating under recorded land agreements for the maintenance of private and common property". Their power could range from the management of open space and community facilities to the provision of mass transportation systems and energy distribution network.

Members of the home association are homeowners who pay participation fees. This association, which requires no public funds can not act ineffectively for several reasons. First, the members have limited past experience in developing new towns and in urbanization affairs. Second, they lack direct access to different organization concerning the new town development. Third, they are a special organization which is not designed for general governmental planning and decision making. Fourth, they have limited power over the development process as they are influenced by a developer, who is usually private. Since the developer is well organized, he will be able to implement his goals more effectively than the residents. Moreover, members of home association have to be well organized to facilitate the decision making process. This would not be easy specially at the first phases of the new town development where the number of homeowners is still little.

## 5. Special Service Districts

Special service districts are non-profit organization which can be established by law to execute special services required by local residents. They provide essential services such as water supply, sewage disposal, or garbage collection. They have no role in the decision making process in the new town. Also, they are not efficient for long-term functions. Special service districts would work whether or Not a local municipality exists. Also, it serves more than one locality and thus disregards municipal boundaries.

# 2.1.6 The Planning Process of the New Town Governance System

Governance system of new town has to be planned prior to the beginning of its construction. This has to be done by the new-town planner, where the developer of the new town is committed to the construction and development process of the new town, and does not have the time required to organize local governance. The new-town planner has to establish and organize a flexible and operational governance system. Rigid governance systems will cause delay in the development process and it will not match with the changing conditions facing the new-town development. This means that there will not be a final and fixed form or structure of the new-town governance, and that the first governance system adopted will be inefficient after a period of time. Also short-term governance will be inefficient because it will respond just to the present urgent needs rather than to long-range requirements, while its decisions will have long-range influence.

A new-town planner has to take into consideration the following aspects in planning the governance system of the new town:

- Specifying the main goals and objectives of the governance system and defining the administrative structure and job description of the working staff which cope with the governance objectives, and according to different new town development stages.
- 2. Defining the power structures and the decision making systems affecting the Governance of the new town.
- 3. Defining the existing or proposed rules, regulations and standards concerning the new town site and determining their effect on the governance system.
- 4. Defining the existing and forth coming financial systems, available loans, funds, subsidies, and taxation systems affecting the governance system.
- 5. Specifying existing public utilities networks and infrastructure available in and around the new-town site.

6. Adopting a policy which attracts re settlers and investments as they are the base of new town.

After taking into consideration the former aspects and a policy has been formulated, the new town planner and his team have to study various forms of governance systems. This study aims to select, then adopt, the optimum governance form which copes with different circumstances concerning the new town site.

The governance plan has to adopt a phased comprehensive plan for the development operation. This plan has to include phased plans for providing public utilities, infrastructure, financial support, taxation system, land-use regulations and community affairs. Also, governance Plan has to study the impact of each phased plan on other development plans. Moreover, the governance plan has to train qualified local leaders in order to take their role in managing the new town, and it has to create a constant community awareness of their needs and community participation in different levels of the development process.

The governance plan has to assign the construction process to a separate body to manage it, so that the governance can supervise the construction work and can coordinate its development phases according to the construction progress. Also the governance has to coordinate its phased development with different governmental organizations, through their representatives, dealing with the new town development process.

The new-town governance cannot work separately. In fact, it has to work within the governmental hierarchy structure of the country, which includes the state, region and local power structure. So, governance plan has to be coordinated with the state and region policy and it has to match with the government national policy. But, this has to be done without losing the newtown its local political identity.

The new-town governance system could be influenced by decisions taken by the central government, specially if it is financially supported by the central Government. This could end in losing the new town its own identity and self dependence in making decisions concerning different aspects of its development operation. In such cases "local government tend to become administrative mechanisms for implementation of national policies, rather than self dynamic centers of authority in their own individual right. (4)

However, the new-town governance will need the assistance of the local or regional government in providing essential public services such as water supply, schools, sewage treatment, and garbage collection. This can be done through a contract between the new-town governance and the nearest government, who is responsible for constructing and managing the public services required by the new town. The contract will lead to improve the quality of the nearest government's services. This situation will occur in the first years of the new town, where it will not have the financial ability or the experience to provide and manage those public services. But, if the nearest government has got the ability to provide those services, or it is not economically weak, the new-town governance can establish a single body to provide and manage them. This single body can be a cooperative or independent company.

One of the main objectives of the new-town governance plan is the transition of resettlers into a community, from separate individuals to one structured community. This transition period will occur after a certain period of time when the community population reaches a considerable number which makes them able to elect their representatives, and they become self-dependent. The transition period as it has to be very important it is also very critical. If this period will become short, there will not be enough time for the resettlers to practice their future role in taking decisions and implementing their own plans. Also, there will

<sup>4.</sup> Ibid.

Be enough time to organize the resettlers into homogeneous groups and to strengthen the sense of community, as one big family.

The longer this transition period is, the more the community will become aware of their role in participating in formulating their own goals and objectives, in sharing some responsibilities -in the decision making process, and the implementation of the new-town plans. Resettlers will require more time in practice self-governing and in dealing with different problems facing the development operation and the growth of their new town. The new-town governance plan has to make much effort in this case, to define a series of phases for the transition period, and to furnish the resettlers with all help, information and past practice experience they require. As the new-town community has to take the role of the developer, in the future, it will be better if they form a joint body for effective co-ordination and to function as a local governing body.

# 2.1.7 New Towns Development by Public and Private Sectors

New towns can be either publicly or privately developed. In a publicly developed new towns, new towns have to be considered as part of the national policy and therefore it has the approval and support of the central government and all its different branches. New Town Development Corporation will benefit financial, advisory, technical and legislative support from the central government. The main objective of the development corporation will be the construction of the new town, according to the governmental plans, within a defined period and the maintenance of its properties. There will not be much attention to govern the resettlers during the first phases of the new town.

Publicly developed new towns will face some problems such as defining the correct time when the community will be able to elect their representatives as local officials. This will be feasible when the community population reaches a certain number and they become aware of their need and mature for their role in governing themselves.

Attention has to be paid also to the problem of transferring and maintaining public services and infrastructure, planned and constructed by the development corporation, to the new government.

Moreover, the new government has to minimize its dependence on supports and subsidies gained from the central government. **In** fact, it has to seek for a partial, self-dependence approach in managing its development. These problems would be solved through an organized community participation approach in all phases of the development process, beginning with the decision making phase till the maintenance phase.

In a privately developed new town, although the new town plan has to cope with the National Policy, conflict of interest will arise between the community and its developer. The main objective of the new town developer will be the searching for profit for more income from his investments, and not for providing a better standard of living conditions, unless high standard services and accommodation have a sound profit and are a good investment. While the community objectives will be acceptable living condition, job opportunity with a feasible income, and standard services. This would make the transition period of the new town to a local government much difficult and would require more time and flexible management system.

The central government would hardly like to give any support to the community of privately developed new town, specially the legislation support. Also public financial subsidies will hardly be available to these new towns because priorities is given to publicly developed new towns. Moreover, private developer will provide services and facilities to the community on a profit base which will not protect the community interests specially low income families. So the conflict between the private developer and the community will delay the development process or even lead to changing the final goals of the new town.

government aiming to get any support, or at least its blessing.

So, privately developed new town has to depend on itself in managing the development of its origin and then its growth. It would be advisable if there will be some kind of coordination between the new town and the central

In a privately or publicly developed new town there will be a great need

to find a qualified government staff to take over the management of the new

town development after the transition period. This staff can be from the

developer's staff that have valuable experience to contribute to their job, or can

be elected from the community. Therefore, elections have to be held more

often than usual to discover the potential leaders living within the new-town

community. The election process will be more efficient if there is community

participation in different steps of the development process. It will be advisable

to select the government staff from various fields of experience from both the

developer's staff and the community.

This will help in facilitating the development process by knowing the exact

needs of the community, their ability, their role, and the technical,

organization experience, and know-how of the developer.

# 2.2 Theory of management of Urban Development in New Towns

# 2.2.1 Programming and Budgeting in the Management of Urban Development

Management of human settlements means the whole complex of actions involved in planning, programming, budgeting, developing, operating and maintaining a settlement. Programming and budgeting have to be considered one of the main actions of management of urban development.

Management of urban development has to coordinate and achieve cooperation between the actors involved in urban development, so as to achieve agreed urban development objectives. This coordination and cooperation have to be done through a well organized programming plans associated with an effective budgeting structure.

The programming process involves all actors, public or private, and actions needed to be undertaken in order to implement the new town plan. These actions provide all different phases of urban development projects, beginning with acquisition and preparation of land and ending with construction operation and maintenance. A list of projects, which forms the whole urban development operation, has to be identified. This includes identifying different phases of the projects; their duration of implementation, cost estimates, and size of each phase to be implemented when a certain number of resettlers is reached and finance is available. Programming also has to set priorities and sequences of implementation among different projects and actions to ensure the optimization of the implementation process.

Programming has to coordinate the role of different actors involved in the urban development operation, specially the public and the private sector. It will be difficult for the private sector to work with the public administration (conflict of interests) unless there is an efficient communication system between them. So,

Programming has to identify the role of each organization (actors) involved in the urban development operation, the relation between those actors, the system of managing and controlling their role, and proposes alternative solutions for different problems that will occur. Programming has to be associated with a flexible time schedule illustrated in graphic charts, and critical path method of the development operation phases.

In brief, programming identifies: who is going to do what, at what time, under which conditions, with what resources, through coordination with whom, and under control and supervision of whom.

Programming has to provide the frame of reference for the budgeting of all urban projects. Feasibility of project implementation has to be estimated according to the investment capabilities of all actors involved in the development operation.

Budgeting has to identify available investments for each project and for its phases, their resources, available loans and their repayment conditions, taxes and their rules, and different payments that have to be done and their schedule. Also, budgeting has to identify banks and other organization that will financially support the urban projects. This has to be combined with searching for appropriate income generating jobs to increase family income and therefore to increase their investment and participation in urban projects. (5)

### 2.2.2 Operation and Maintenance in the Management of Urban Development

In a period of economic constraints, the rational utilization of what already exists in the built environment of human settlement deserves much more attention.

In new towns much money is invested in constructing buildings, networks, services, and infrastructure. This initial capital invested in the new town has to be protected

<sup>5.</sup> United Nations Center for Human Settlements (Habitat), <u>Global Report on Human Settlements-1986</u>, Oxford University Press, 1987, p: 101.

And to be managed efficiently and economically, as much as possible, to extend their useful life. So, there must be a need for developing approaches to the operation and maintenance of housing and services. This will be a difficult task as it requires political support on the part of the national and local government and training programs, resettlers participation, and enough investments.

Operation and maintenance aim to manage the massive investments in infrastructure and structure, to keep them in a good condition, and to maximize their working life. Without efficient operation and maintenance programs buildings can be deteriorated quickly causing its inadequate use and a loss of valuable assets. Water-supply systems can also be damaged causing enormous loss of water and energy and increasing its cost on the long run. Moreover, with poor operation and maintenance programs sewage system can be blocked causing overflowing and environmental pollution, road network can be deteriorated leading to inefficient traffic management and immobilizing public and private vehicles.

To facilitate operation and maintenance programs of buildings and services in new towns it will be crucial that their design has to be appropriate according to local environment, the users habits, their living condition, their financial ability, and local building standards. When operating and maintaining buildings and services following a model, too sophisticated, it will be inappropriate and will cause many problems such as: shortage of expensive spare-parts and maintenance equipment, lack of community awareness of using it, and scarcity of highly skilled personnel. Moreover, it will follow foreign advanced technology and not creating and developing local appropriate technology, which will end by loosing local identity and self-dependence.

Choosing the cheapest solution for designing building and services will not always be the best and the cheapest one on the long run, as it will need much expenditures in the future to maintain it and to operate it effectively. So, selecting Copyrights ©:: Center of Planning and Architecture Studies: All rights reserved. www.cpas-egypt.com

The appropriate design has to suit a special criterion taking into consideration the local environment, satisfying the user's requirements, its durability on the long run, its efficiency and affordability.

Operation and maintenance programs for buildings and services have to take into consideration the promising and important role of resettlers, participation. For resettlers participation to be effective, they have to be organized into groups and to establish co-operatives among themselves to facilitate their effort and role in managing different services and infrastructure located into their area. Education and training programs have to be given to the re settlers to increase their awareness and to furnish them with the knownhow experience of operating and maintaining their buildings and infrastructure. This training program aims to improve different resettlers skills, thus increasing employment and income generating opportunities among them. Also, education programs aim to upgrade and improve the resettlers habits and way of living thus preserving their environment and enhancing their living condition.

Operation and maintenance programs for housing prevent the loss of valuable housing units from deterioration, and reduce the costly relocation of families and minimize the disruption of social fabric. Effective operation and maintenance programs guarantee the effective use of public and private resources. Therefore existing building regulation, codes, and standards have to be reviewed and modified to ensure the efficient implementation of those programs. Although implementing those programs will seem to be expensive but they will cost more on the long run. For example, the cost of rehabilitation of existing housing stock and infrastructure will be considerably less than the cost of constructing new buildings and infrastructure. Thereby, it will be important that new-town governance have to include a maintenance department into its structure to guide and develop the implementation of operation and maintenance programs.

# 2.2.3 Resettlers Participation in the Management of Urban Development

The management of urban development aims to coordinate and achieve cooperation among the actors involved in the urban development process in order to achieve the urban development objectives. Therefore the resettlers have to be considered as one of the main actors involved in the urban development process, as they represent the private sector and, more important, the beneficiaries of the development operation. So the resettlers have to have a great impact and well defined role in managing their own development. This requires a well designed system of communication and information between the community and the new town governance. Also, it needs a special mechanism to encourage and to facilitate their participation. The re settlers participation approach has to be politically supported within a legal framework to ensure its integration in the management structure of the new town, and to ease its role in the management process.

For effective re settlers participation in managing their development, resettlers have to be organized into groups of families and these groups have to be organized into clusters to establish a hierarchical structure. On the other hand resettlers have to practice electing their representatives in a democratic system, so each group of families has to elect its representative and consequently each cluster of groups has to elect their representative. Through organizing resettlers, they will have the opportunity to discuss actions and to take decisions concerning their local development. (6)

Beside organizing resettlers there have to be resettlers awareness programs to increase their consciousness of their development problems, their available resources and potentialities, the opportunities of solving these problems, and their

<sup>6.</sup> United Nation Center for Human Settlements (Habitate), <u>Promoting Organizing Self-help through Cooperative Modes of Participation</u>, Nairobi, Kenya, 1984, p. 22.

Role in managing their development. Resettlers awareness programs can be achieved through several means of communication between the resettlers and the new town governance system, such as public and private meetings, television and radio broadcasting, training modules, posters and newspaper. Also, the resettlers or their representatives can attend some of the governance meetings, and they will be given a chance to express their opinion or comments. (7)

Resettlers can participate, with different degrees, in managing the different phases of the development process. In the planning phase of urban development resettlers nave to participate, with the new town governance, in defining the goals and objectives of further development projects, and in replanning the strategies and in setting the priorities to achieve different objectives or actions. Their participation in managing this phase is crucial to guarantee the success of plans, in terms of ensuring that the goals and strategies adopted respond to the actual needs and requirements of the resettlers and that it receives their adequate support.

Resettlers participation in managing the programming phase of the development process will be important to ensure setting programs taking into consideration the role of resettlers in the implementation phase, their ability, their age and number, and other available skills. Programming has to manage and mobilize all available human resources and creative energy to achieve development objectives. Also programming has to coordinate the resettlers role in managing development with the political, technical and administrative actors directly involved in the development process. Through programming, resettlers will agree on what they are going to do, at what time, under which conditions, with what resources and with coordination with whom.

<sup>7.</sup> Geoffrey K. Payne, <u>Low-Income Housin2 in the Develooin2 World.</u>
<a href="mailto:the Role of Site and Services and Settlement U02radin2">the Role of Site and Services and Settlement U02radin2</a>, John Wiley and Sons, Ltd, 1984, p: 60.

Resettlers participation in managing the budgeting phase will clarify the financial ability of the re settlers and will increase their income generating opportunities. Through budgeting, resettlers will be willing to invest more money in developing their locality and they will agree on implementing development projects according to their affordability.

Resettlers participation in managing the implementation phase will have a great impact. Resettlers will need training programs, know-how of appropriate building technology, and other advice consultation at the beginning of the implementation process, but at the end they will cut-down the total cost of the project as they participate as a cheap labour. Resettlers will be willing to participate in implementing what they have decided to do, and their role in the implementation process gives them the experience and knowledge needed for further extending the project in the future or even implementing other projects. Their participation in the implementation process creates a sense of responsibility for maintaining, operating and managing the projects in the future. (8)

Resettler participation can include, beside men and women participation, youth participation as they are the future of the new town. They should have a share and a role in every step of the development process, so that they will gain the practical experience, know-how, of managing their town in the future. School program can include in their educational curriculum the theory and practice of managing the development operation of new towns, so that the youth will be well prepared to participate effectively and share the responsibility of managing their future.

<sup>8.</sup> Caroline O. Moser, <u>Evaluating: Community Participation in Urban Development Projects</u>, proceeding of a workshop held at the Development Planning Unit (DPU). Barlett School of Architecture and Planning. University College, London, 14th January 1983, p: 3.

In general, resettlers have to be able to react, express opinion, work, vote and make decisions on local matters of concern. New town governance have to take into consideration all the implications of resettlers participation in managing the development operation of their new town. Resettler participation requires much time, money and effort to be well organized and may cause delay to the development process, but also neglecting them can cause many problems to the development process.

# 2.2.4 Human-Resources Input in the Management of Urban Development

Human resources are generally the most available resource in developing new towns, in terms of number but not necessary in quality. Human resources are not often qualified enough to have an effective role in the development operation as the efficient and qualified personnel are normally concentrated in central government position. So there should be a great need for improving local capabilities and a training strategy to increase the efficiency of personnel in the new town.

Human resources in new towns require a comprehensive range of training programs, ranging from the development of managerial and technical skills to the strengthening of re settlers organization and participation. Training programs have to be practically oriented and specially designed to meet the requirements of both the resettlers and the new town officers, according to specific urban policies. Training programs for resettlers aim to increase their effective participation, develop required skills for the development operation, and create public awareness. While training programs for new town officers aim to provide them with different skills and experience required for dealing with the resettlers, and how to organize and control them. Moreover, training programs have to

Furnish them with common knowledge of how to deal with different technical, legal, administrative and social aspects of the development operation. (9)

These training programs, for both the resettlers and the new town officers, have to be practically oriented and specially designed according to age, sex, capabilities and qualifications of the trainees, as to meet the needs of urban policies.

Training programs, beside training individuals, have to create an institution which is capable of formulating and executing new town policies and programs. This institution has to focus on problems of new town development operation, and to enhance training modules, and to maximize the use of human resources, with other environmental resources, in an appropriate way to fulfill the objectives of the new town policies. Special consideration has to be given to training programs on simple operational and maintenance needs of basic services, to create trained service personnel who will have a great impact on the quality of life of the resettlers.

In order to facilitate the human input in the management of urban development) resettlers awareness programs are strongly needed. Resettlers awareness programs aim to inform the resettlers with the role of the new town governance and other organizations in the development process, and to acquaint them with their role, their rights and opportunities of participation in and benefiting from the development process. They have to be informed with the rules and regulations organizing and managing different physical, legal, financial, elective and administrative aspects.

<sup>9.</sup> United Nations Center for Human Settlements (Habitate), <u>Site and Services Schemes: The scope for community participation. Training Modules</u>, Nairobi, Kenya, 1984, p. 2.

Awareness programs have to be integrated into other training programs specially designed for the re settlers. (10)

The success of any training program is based on the success of the trainees themselves, and the availability of training materials, as trainers have to be highly qualified, and have experience in dealing with the management of urban development in new towns. Trainers, besides providing direct training programs, have to develop and improve the autonomous training capabilities. Foreign training programs will not be effective to trainers who are sent to study abroad. They will come back with concepts and ideas relevant to developed countries and will be irrelevant to local development needs. Therefore, trainers have to adopt programs which suit the local environment, local habits, way of living, and satisfy the resettlers actual needs.

Qualified trainers and new town managers have to be considered as an important and valuable asset in the development operation. Through them, training programs and administrative structures have to be built. It will be important to attract and keep qualified trainers and managers serving in the new town for a long period. Incentives have to be offered to them, which will vary from political, social, or professional motivation, such as rewards and increasing of salaries, to career development and promotion opportunities. Incentives value has to be appropriate to the degree of responsibilities, social status, and the incentives value offered in central government and private sector.

# 2.2.5 The Distribution of Responsibilities in the Management of Urban Development

Urban management responsibilities will be undertaken at different administrative levels: national, regional, municipal and local level. The

<sup>10.</sup> Peter J. Swan, <u>The Practice of People Participation - Seven Asian Experiences in Housing: The Poor, Human Settlement Division.</u> Asian Institute of technology, Bangkok, Thailand, 1980, p: 170.

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Distribution of the urban management responsibilities among these levels is done according to development and administration policy maintained by the central government. The responsibilities adopted at the national level can vary from setting strategic development policies with its different detailed plans for different administrative levels and managing the whole development operation on a centralized approach, to decentralizing the power of decision making to different administrative levels to manage their own role, and to act as a central guidance, coordinator, and provide technical support to lower administrative levels.

Managing urban development of new towns will be best achieved at the local level with coordination and respond to national policies. At local level decision making process will respond better to the actual needs of the resettlers, and services will be efficiently delivered according to the resettlers affordability. Also, resettlers participation in the development operation will be more organized and operative.

Urban management of new towns has to be accomplished within a broad frame work of national development strategies for the benefit of the country as a whole. Consequently, goals and policies of new towns have to be coordinated with those of higher level of government. On the other hand, central governments have to support local levels (new towns) legally, politically, financially and technically. Also, it has to supply the new town governance with required qualified personnel, training programs and institutional participation in the development operation. New towns management has to enjoy some degree of freedom and self-dependence in its performance, but within the national policies, plans and through coordination with different organizations participating in the development operation.

Decentralization of urban management responsibilities will not mean just transferring some functions previously performed by central government to new

Town governance, or implementing actions and decisions taken by the central government alone. However, it includes the transferring of financial and human resources required by the new town governance. Also, it includes the transferring of decision-making power, the decentralization of the political process, and strengthening local administration, as they are essential to efficient development management of new towns.

### 2.2.6 Public and Private Sector Association in the Management of Urban Development

The public sector and the private sector, including individual and group of resettlers, with their different resources and needs must have a partnership role in managing the urban development process of new towns. Public and private sector association will be achieved in case of housing construction, improving the infrastructure and in providing services. There should be a degree of coordination and integration between the role of both the public and the private sector.

In case of housing construction, the role of public sector will be in preparing the site, providing subsided building materials and equipment, supporting the private sector financially and technically, also, arranging training programs for the resettlers in the skills needed for the construction process. On the other hand, the role of the private sector will be their participation in constructing, through contractors or by themselves, a part or the whole housing project. This will give them the experience and training needed in managing the maintenance and operation of their housing project, and in expanding it in the future according to their needs and affordability.

In case of improving infrastructure the role of the public sector will be the construction of main stations of collecting sewage, refining and producing water, and transferring electric power, also, implementing the main infrastructure network including the main connections to the residential areas.

The public sector has to Provide technical support and training to assist the private sector in his role. The role of the private sector will be performed in extending and connecting the infrastructure network to their housing units. The people will participate in improving and managing the infrastructure connections which they have implemented by themselves, because they spent money, time and effort and gained experience from achieving them. This will create a sense of responsibility among themselves and will increase their awareness toward their environment.

However, in case of providing services, the role of the public sector, through the new town governance, will manage the functioning of the new town as a whole and providing the initial services at a minimum standard. These services will include transportation system, commercial, educational and solid waste collection. The public sector has to encourage and to facilitate the private sector actions, while the role of the private sector will be improving, extending and managing these services according to their actual needs and afford ability.

In all cases, the public sector has to establish a control, supervision and a follow up system to manage the success of the actions and projects held by the private sector. This has to be done according to agreed quality standards and codes, and that the public sector should be able to manage and enforce these standards. To avoid any corruption in the public sector it will be advisable if the managers of the public sector are accountable and responsible to the private sector in one form or other.

On the other side, the private sector has to manage his role according to the public sector rules and regulations, and with coordination with his policies and plans. The private sector will be more efficient in providing specific services which are often found the most profitable action, leaving other services less profitable to the public sector to handle them.

This condition will present an advantage as long as satisfactory quality levels are ensured, and provided services are made available at affordable prices. Also, the private sector will be more efficient than the public sector as the private sector can take decisions, work and move quickly without engagement to long procedures, routine and bureaucracy.

The public and private sector association will be better managed at the local level, with coordination with the regional and national level. This requires a decentralization of power and strengthening local administration system and local managers.

## 2.2.7 The Role of International Institutions in Improving the Efficiency of Urban Management of New Towns

To improve the efficiency of urban management of new towns, international institutions have to be aware of the need for coordinated decentralization of all phases of development management. This requires efficient communication and cooperation with both the central government, which will be responsible for setting policies, plans and allocate investments, and the local government which will be responsible for transferring these policies and plans into reality.

The role of international institution should be not only to assist and support development programs based on a project-by-project or site-by-site approach, but should be extended to include the strengthening of urban management and setting up municipal institutions that will be self sufficient and capable of guiding future development. Through enhancing urban management the new town governance will be able to coordinate and deal efficiency with different development programs, and will be able to improve project cost recovery, tax collection and maintenance of infrastructure.

International institutions will often be interested in financing urban projects for low income resettlers, including providing housing, infrastructure and urban Services.

However, this approach should be re-evaluated and expanded to include the upgrading and support of urban administration, including new town governance and local institutions dealing with urban development. Also, international institutions will often ignore existing local administration structure in new towns. They pay attention and consideration only to implement projects or deliver services to low income resettlers. After project implementation is completed, the international institution will leave the task of operating, managing and maintaining the new projects to the new town governance. As a consequence, new town governance will hardly manage these new projects as they are not prepared for it, have no experience or ability and haven't participated in its implementation.

Accordingly, international institutions have to assist local urban administration by guiding and helping them to be able to evaluate and change their plans and policies, so that they will be able to extend and manage low-cost housing and infrastructure projects without outside help. Through this approach international institutions will ensure that their adopted new concepts and policies for urban development will be continued by municipal and national government. (11)

As external resources will never be sufficient to meet local need, so international institutions have to strengthen local institutional capacity. Special consideration has to be paid to upgrade new town governance staff, providing training programs to administrative personnel at local and municipal level, and redescribing their job description.

Moreover, international institutions will better support the ability of a self dependence authority to undertake urban development projects. This self dependence authority, whether it will be from the private or the public sector,

<sup>11.</sup> United Nation Center for Human Settlements (Habitat), <u>Global Report on Human Settlements-1986</u>, Oxford University Press, 1987, p: 114.

Should have all the authorities needed to implement urban development projects in new towns. It should have the ownership of the site and have the freedom to make decisions, implement projects and allocate its investments wherever it requires. The self-dependence authority will manage several integrated projects involved in the delivery of a variety of urban service components and will develop an institutional framework capable to coordinate complex urban tasks crossing administrative lines. However, the self-dependence authority has to work within municipal and national policies and regulations, but it has to be self-sufficient and self-motivated in managing all aspects of the development operation. This will ensure the cost recovery of investments allocated in the site and will repay the funds received from international institutions. The approach will encourage farther similar projects. (12)

The main advantage of this approach will be the freedom to work away from routine, long governmental procedures and bureaucracy that will occur in new town governance. This is because the new town governance will often work with interrelations with other governmental organization or agencies to deliver services, housing and infrastructure. It will be difficult to new town governance, with its limited capabilities and resources, to organize all managerial aspects of the urban development operation. New town governance will not be able to bring, control and allocate investments over development projects and also to market the new town projects and to ensure their cost recovery.

A self-dependent authority with all power needed to develop new towns will be capable to coordinate the implement housing, services and infrastructure projects along their different phases. It will be able to control, re-evaluate and replan different development projects according to different circumstances that will occur during the development operation, without going into long procedures to take just one decision.

<sup>12</sup> Ihid

# 2.3 The Decision Making Process in Managing Urban Development

#### INTRODUCTION

In practice it has been proved that when planning reaches its implementation stage many unseen factors appear and decision making faces a complexity of items which might change the whole planning concept. Planning therefore is not a static form of urban development guidance but an operational process which in practice faces a sequence of actions and reactions when more actors become involved in the decision making process. To put more light on this practical side of planning a group of researchers (13) started their investigation in this area in a long term exercise which involved a number of actors and participants. They came out from this exercise with a practical methodology spelling out the organization and management of decision making process, as explained in the following review.

### **2.3.1** The Strategic Choice Approach

To achieve any action or activity there should to be a certain kind of planning through which decisions could be taken to achieve the required action or activity. These activities will range from a simple one action to a complex of interrelated actions. Consequently, decision making for a simple action with a defined and clear alternative ways of how to achieve it will be considered a simple decision, as it requires no long time to examine the alternatives and to reach the right decision. While a decision making for a complex interrelated actions, with a number of alternative approaches and integrated options to achieve it will be a difficult one, as it requires a long time to review and examine all available options to select the correct one.

Planning of urban development will be considered as a multi complex activity, with many actions to be achieved. Decision making in any urban planning process will be a difficult one for the various and changeable options, alternatives and factors affecting the planning process.

<sup>13.</sup> John Friend and Alien Hickling

Time has to be a crucial factor and with time pressure over a planning process there should be a certain approach to take a quick decision and to choose the best approach to tackle a certain problem. This approach will be defined by J. Friend as "the strategic choice approach" which deals with planning process under pressure of time, lack of enough information, unclear objectives and insufficient coordination between different actors. This approach is one in which planning is viewed as a continuous process, a process of choosing strategically through time. The process of strategic choice will better be presented as more cyclic rather than lineal and sequential phases. Therefore, planning process viewed as a strategic choice will be seen as a continuance shifting between different and complementary modes of decision making activity. These modes will be the shaping of the problem, designing certain solutions, comparing between them and choosing the suitable one. (14)

Planning under pressure and the strategic choice approach are lately considered as a unique and an important issue in managing urban development as conventional planning process, in practice, failed in achieving its objectives. This is because urban planning is dealing with many uncertain and changeable factors that affected the development operation of new towns during its implementation.

Recently, the issue of choosing strategically through time became a subject of many researches and conferences. One of the unique researches dealing with that issue was the one done by both John Friend and Allen Hickling. It took twelve years in conception and completion of their research. The origin of this research was from their work in the Institute for Operational Research (IOR) in 1963, as a

<sup>14.</sup> John Friend and Alien Hickling, <u>Planning: Under Pressure - The Strategic Choice Approach</u>, Pergamon Press, 1987, p: 1.

unit of the Tavistock Institute of human relations in London, as the result of a joint initiative on the part of the Councils of the Tavistock Institute and the National Operational Research Society. Their work was not a theoretical research but a practical research based on field studies, organizing training modules and useful experience gained from applying their approach into different cases. They collaborated with users in many kinds of organizations, public and private, including managers, planners, policy makers, and local governmental officers. It will be important to refer to the main concept of their approach as presented in their research in the following part.

### 2.3.2 The Philosophy of Planning Under Pressure

Decision-makers dealing with any kind of planning activity will make their own decisions according to their experience and beliefs gained from their previous working lives, rather than to their theoretical beliefs. The strategic choice approach, adopted in this research, attempts to clarify the difficulties and confusion that face experienced decision-makers in their work, and their often spontaneous Judgments and decisions in choosing how to respond to any problem. In practice, such judgments will sometimes be accompanied by a sense of discomfort or even guilt. For the decision makers may feel they are departing from certain principles of rational behavior which they have been taught to respect. Indeed, the view of planning as a strategic choice is found to offer more of a challenge to such idealized principles of rationality than it does to the spontaneous judgments that seem. Characteristic of planning process.

Also, planning as a strategic choice is seen as a craft, full of designing and challenge, a craft through which people can develop their capacity to think and act creatively in coping with the complexities and uncertainties that face them in practice. The work strategic, according to the research, means that the view of planning as strategic choice is one that can be applied not only to decision making

In formal organizational setting, but to the choices and uncertainties which people face in their personal, family and community lives.

Through applying the strategic choice approach in different cases the research stated that most of the more demanding problems have involved challenges of collective decision-making, either in organizational or inter organizational settings; and this can have the effect of confusing many of the familiar differences of task and discipline around which organizational structures are usually designed.

The larger and more complex the organization is, the more it will be expected that decision-making responsibilities will become differentiated according to a collection of operational, managerial or interrelation role. The more likely it will be that specialized plan-making functions will be developed in an effort to maintain a coordinated, longer-term view isolated from everyday management pressures. However, no plan-making activity will remain valued within an organization unless it can provide support for the more difficult and important decisions people face; and it will be a common experience that carefully prepared plans can quickly lose their relevance under the pressures of day-to-day events. The combined pressures or urgency, competition for resources and opportunities in the world outside can soon lead to disenhancement and confusion in the arrangements for making plans, while the pressures of complexity, conflict and overload can lead to hesitation and changes in the making of day-to-day decisions.

### 2.3.3 Difficulties of Decision Making in Practice

A research was made by the municipal of Coventry (a major English city) between 1963 and 1967 concerning the processes of policy-making and planning in local government. Through this research some comments of the continual difficulties of decision-making in such complex circumstances gradually came out. Among these comments were the following:

1. That people held different and continually shifting views about the shape of the issues they faced and about how closely or widely the boundaries of their concern should be drawn.

- 2. That there was continuous pressures on them to arrive at commitments to action in a short time without taking a broader and more comprehensive view of the issues
- 3. That there was a continuing difficulty of balancing urgency against uncertainty in decision-making through time.
- 4. And that there were continuous difficulties in distinguishing the technical from the political aspects of the decision process.

As a result of this experience, a view was presented of five broad dimensions in which difficult choices of balance tend to appear in the management of a continuing process of strategic choice. So, there is a choice between (Fig. 2.1).

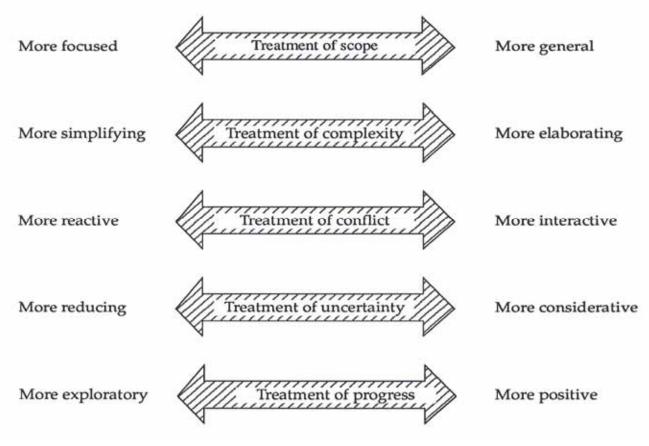


Fig. 2.1: Judgments of Balance in Strategic Choice Approach
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- 1. A more focused and a more general treatment of problem scope.
- 2. A more simplifying and a more elaborating treatment of complexity.
- 3. A more reactive and a more interactive treatment of conflict.
- 4. A more reducing and a more considerative treatment of uncertainty.
- 5. A more exploratory and a more positive treatment of progress through time.

### 2.3.4 Responding to Difficulties of Decision Making

The term planning, used in the research, refers generally to the process of choosing strategically, in which the activities of making plans, decisions and policies can come together in defined and dynamic ways. However, in building up a view of the way this process works, it will be useful to begin with a more static picture. This picture, which will be quite simple yet, also quite general in its application, has to focus on any situation in which one or more decision-makers are experiencing difficulty in choosing how they should act in response to some particular decision problem with which they are currently concerned.

The decision problem itself is drawn as a cloud, to indicate that its shape will often be to some degree unknown. However, what makes it problematic to the decision makers is that they are experiencing some pressure to arrive at a decision, yet it is not clear to them what course of action they should choose. These pressures are that they need more information, more coordination and clear objectives of the decision problem (Fig. 2.2).

Very often, decision makers will see the way out of their present difficulties in terms of explorations of technical nature. They will need more information about their working environment. This includes various forms of casting and estimating exercises, surveys, technical analysis, research studies, or in some circumstances, proposals for investment in more ambitious forms of mathematical or economic modeling. Whatever the form of investigation is, the purpose will be to reduce the difficulties of making decisions by investing

in a process of exploration into Particular aspects of the environment about which it will be felt that too little has been currently known.

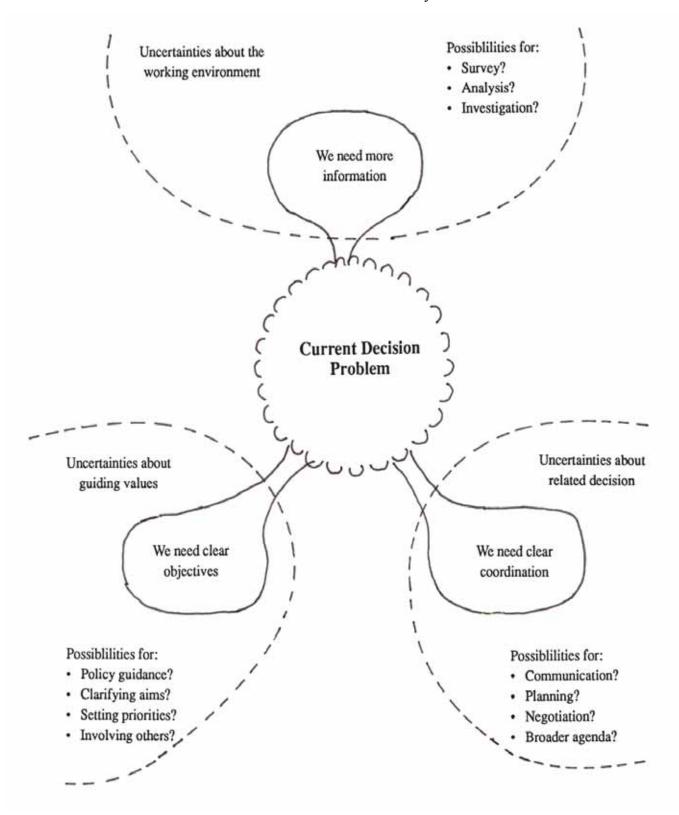


Fig. 2.2: Responding to Difficulties of Decision Making
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Other decision makers, meanwhile, will see the way out of the difficulty in terms of other, less technical, kinds of exploration designed to establish more clear policy values that should guide their choice of action. They will need to set clear objectives for their problem. Typically, they will call for investment in activities designed to clarify goals, objectives, aims or policy guidelines, whether through formal or informal channels. **In** some situations, this will mean simply consulting decision-maker who has more direct responsibility for organizational policy; in others it could mean seeking the involvement in the process by a range of affected interest groups or their representatives.

A third response, by decision makers, will seek the way out of the difficulty by extending the current agenda of decision-making concern. People supporting this response will often argue that the decision problem currently in view will be one that cannot realistically be treated in isolation, because it will be connected to one or more other decision problems which lie ahead. So the demand here will be for some form of coordination, negotiation or planning exercise that allow the current decision problem to be explored alongside others within a broader and general problem focus.

Each of the three kinds of demands (for more information, for clearer objectives and for more coordination) can be regarded as a different kind of attempt to manage the current state of uncertainty over what should be done about the current decision situation. Indeed, it will be possible to go on to identify the three general categories of uncertainty along the lines indicated below, which are distinguished by the different forms of response that can be made. These three types of uncertainty play an important part in the philosophy of planning as a process of strategic choice, and they can be formally described as follows:

- 1. Uncertainties about the working environment.
- 2. Uncertainties about guiding values.
- 3. Uncertainties about related decisions.

In practice, as it is explained in the research, it will be often difficult for people to agree which of the three kinds of uncertainty are most crucial in a particular decision situation, and, therefore, how much attention should be given to each possible form of response. For example, members of a city planning team, considering whether or not to recommend the approval of an application to build a new hotel, may see possibilities either for calling for deeper investigation of its traffic implications, or for seeking clearer guidance of the Council's policies in relation to this particular kind of development, or for initiating a wider review of tourism possibilities within the city as a whole. They may of course want to move in all three directions more or less at the same time, however, this will not always be possible where there is pressure to make a speedy decisions. Nor will it necessarily be desirable to invest resources in all possible ways of responding to uncertainty, especially if some of them are expected to be less effective than others.

# 2.3.5 Modes of Decision-Making in the Strategic Choice Approach

In developing further the view of planning as a process of strategic choice, the researcher showed the process within "cloud" as continually shifting between different and complementary "modes" of decision-making activity. In the simple situation of decision-making, the nature of the problem input and the expected decision output is well defined. This movement can be seen in terms of only two complementary modes: one concerned with designing possible courses of action, and the other with comparing them in the light of some view of what their consequences may be (Fig.2.3).

This picture has much in common with other, more conventional models of decision-making process, which tend to present stages or activities in logical sequence, have a beginning and an end, while allowing for elements of feedback or Recycling in between.

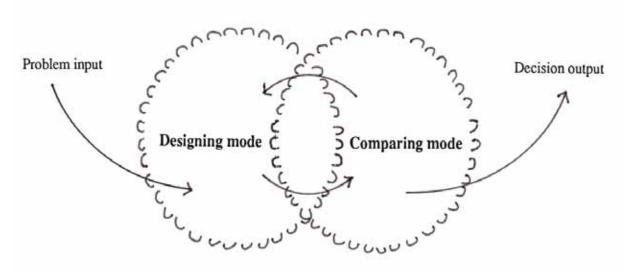


Fig. 2.3: A Process of Simple Choice

The diffused continuous kind of process which is characteristic of the making of complex decisions in practice involves coping with multiple problem input and multiple decision output, with no clear sequential relationships between the two. To represent this kind of process, it will be necessary to move to a rather more elaborated picture of the process within the "cloud", introducing two additional modes: shaping mode and choosing mode (Fig. 2.4).

The shaping mode is concerned with the shaping of problems; a mode within which judgments about the possible connections between one field of choice and another can have a crucial role to play.

The choosing mode is concerned with the formation of proposed commitments to act progressively through time.

The most conventional progression might appear to be from shaping problem, through designing possibilities, to comparing their consequences and then to a final choosing of action. However, such a progression will likely to be neither straightforward nor realistic, as the process is to be seen as a continuous one, with no clear beginning and no single end. So, the choice of action to deal with some parts of the problem situation will leave other choices open for the future, creating opportunities for further reshaping of problems as unexpected events

Occur and new connections begin to appear. This will be the nature of the uncertain situation with which the strategic choice approach will deal.

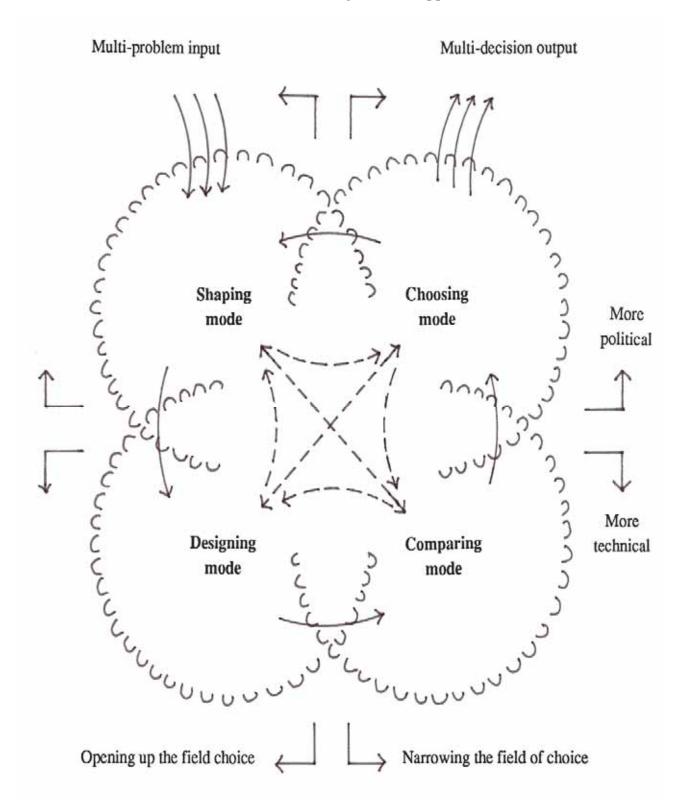


Fig. 2.4: The Process of Strategic Choice

In the previous process of strategic choice it is obvious that both shaping and choosing modes are more political, while both designing and comparing modes are more technical. Moreover, it is evident that both choosing and comparing modes are primarily leading towards the task of opening up the field of choice facing the decision-makers, while the shaping and designing modes are leading towards narrowing that field down again in order to work towards agreement on action.

The unique process of strategic choice approach is different from the conventional approaches where systematic methods of designing courses of action and comparing their results have reached a considerable level of sophistication. For example, the conventional systematic methods have been developed for supporting investment proposals in the light of predicting their economic, social and environmental implications, which end by comparing a great number of alternative courses of action. While there are various computer-aided methods which can help in generating a range of alternatives within some of the better understood fields of technological design.

However, the strategic choice approach can be seen as an appropriate technology. Appropriate in the sense that it is not planned as an advanced technology for use primarily by the expert. Rather the technology is designed to support the interactive work of groups of people who have different perspective to contribute to a problem, who face quite difficult challenges in communication with each other, and yet who may appreciate the importance of working quickly and informally under the pressure of day-to-day events.

### 2.3.6 The Concept of the Decision Area in the Strategic Choice Approach

In the process of strategic choice approach, as it has been in the research, the shaping of the decision problem is the first step, in practice, in this process as all the problem inputs are joint together into the shaping mode to form a decision

Area The concept of decision area offers no more than a means of describing and labeling any problem situation where people can see an opportunity to choose between different courses of action.

Any developer might face a range of decision problems, to do with timing, choice between alterative locations, scale, design lack of finance and other developing aspects. These can either be expressed as a single, rather complex, decision area or (as will be more usual when using strategic choice methods) as a set of different decision areas, the mutual relationships of which will have to be explored.

In each of these situations there is an opportunity for decision-makers, whether alone or in association with others, to act in at least two alternative ways. In each situation there is some sense of pressure or concern to arrive at a commitment to some preferred course of action amongst those believed to be available. It is expected that some decision areas will carry greater sense of urgency to act than others. It is this sense of pressure to act that creates a decision problem for those decision-makers.

To illustrate the concept of the decision area it is useful to give a case example of a group of decision-makers dealing with the problem of constructing a road crossing their residential locality. The proposed road affects many physical, economic or even social aspects in the environment around. Through using strategic choice methods decision-makers set a list of decision areas with their brief label for purposes of future reference. Any list of decision areas contains various types of opportunity for choice. The list of decision areas can be as follows (Table 2.1):

As soon as a set of opportunities for choice has been formulated as a list of decision areas, decision-makers will begin to explore which decision areas can be viewed as interconnected, in the sense that there will be a case for considering them jointly rather than attempting to come to decision taking each of them one at a time.

For example, in dealing with land use or location problems in particular, planner will focus on spatially defined decision areas and to look for links in terms of close site location or similar relationships, as in considering shopping center location and the land use of the central area together at the same time (Fig. 2.5).

Table (2.1): The Decision Areas and their Label

	Decision Area	Label
-	Which route to choose to construct the new road?	Road line?
-	Where to locate the proposed local shopping center for the residential area?	Shop location?
-	Whether or not to declare the residential area near the road a housing improvement area?	Housing improvement?
-	What land use to specify for the cleared housing area in the center of residential area?	Center area?
-	What kind of investment needed for the project?	Investments?
-	Where to locate the proposed gas work site?	Gas site?
-	When to schedule the dead line of constructing the new schools?	School construction?

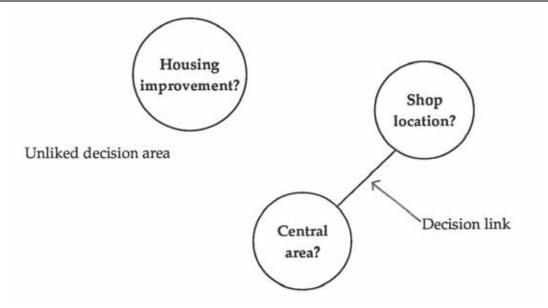


Fig. 2.5: Connecting Alike Decision Areas with Decision Links.

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So, a decision link is defined as a relationship between two decision areas expressing a belief that it makes a difference to consider them jointly instead of separately.

In any situation where a complex problem is expressed in terms of a set of several decision areas, some but by no means all of which may be directly connected by decision links, then it is possible to use a graphical connection to build up a wider view of the structure of that problem in the form of what can be called a "decision graph". So, a decision graph will be a diagrammatic representation of a set of decision areas and the relationships between them expressed as decision links (Fig. 2.6).

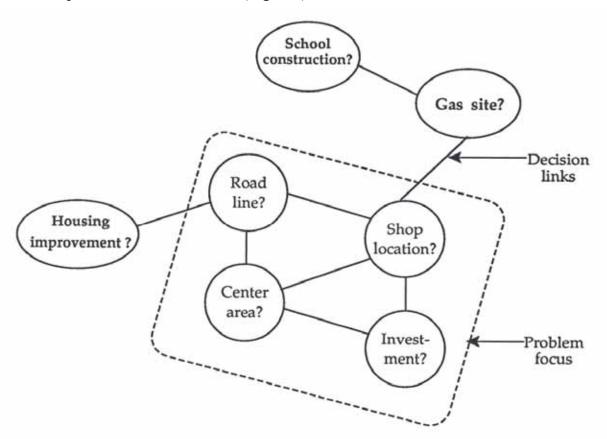


Fig. 2.6: A Problem Focus with the Decision Graph

The value of any decision graph depends on the picture it presents about the structure of relationships between decision areas of a complex problem, a picture that can be modified through time and reviewed wherever there is disagreement between the decision makers. Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

In this way decision-makers will proceed, through as many repetitions as need be, towards deeper examination of possibilities for action and their consequences, either within the decision graph as a whole or within selected decision areas as a focal area.

The possibility of focusing on a selected cluster of decision areas within a lager decision graph offers an important field of judgment in a process of strategic choice. Indeed, it marks a critical point of transition from the work of the shaping mode to that of the designing mode, specially where the decision graph is so large and complex in its structure that it will be difficult to think of designing possible ways forward while keeping the full set of interconnected decision areas in view.

So, a problem focus is any subset of the decision areas in a decision graph which is selected for closer examination. The scope of this problem focus can be changed, repeatedly if so desired, as work on the problem proceeds. The narrower the focus, the less work there will be to do in the designing mode, especially if the alternatives within the decision area are well defined and clear. So, the more rapid can be the progress forward into the comparing mode.

Despite all the information about the structure of a decision problem that is contained within a decision graph, or within a particular problem focus within a decision graph, this form of problem representation doesn't indicate what range of possible actions is available to the decision-makers. To make progress in this direction, it is necessary to move into the more technical aspect of the designing mode, by setting different options for each decision area. A decision option will be anyone of the available choices of courses of action that can be considered within a decision area.

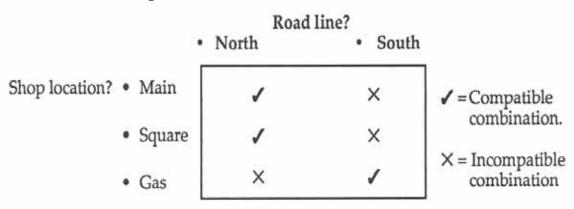
In practice, there is a good opportunity to debate these options among decisions-makers who have different appreciations to the problems.

During such a debate, different perception will emerge not only about the number of options in each decision area, but also about the terms in which the will be expressed. As an example, available options for decision areas in the problem focus can be as follows (Table 2.2):

Decision area	Options	Options Label
- Road Line?	- Northern route	- North
	- Southern route	- South
- Shop location	- On main street	- Main
	- Central square	- Square
	- Near gas works site	- Gas
- Center area	- Industry	- Ind.
	- Open space	- Open.
	- Offices	- Offices
- Investments	- Private sector	- Private
	- Public sector	- Public

Once options have been identified, the question arises of what possibilities for choice will be found not merely within each decision area taken separately, but within linked pairs or sets of decision areas within the selected problem focus. It therefore becomes necessary to assume how far options could form different decision areas. This is achieved through using an option bar which indicates the output of matching two options from different decision areas, if they are compatible or not. As an example, decision-makers can reach the following results after debating and discussing the various kinds of constraint which will be met in trying to combine particular options in one decision area with particular options in other decision area. (Fig. 2.3).

Table (2.3): An Option Bar



After reaching the results of combining different options of each decision area with other options of other decision areas linked together, it will be possible to represent the final outputs in a diagrammatic option graph. In the option graph decision areas will be represented by circles, as in the decision graph, while the set of options available within each decision area will be specified within each circle. The structure of the option graph, which can be changed through the time according to changing circumstances, will give a simple and yet comprehensive view of the specific problem the decision-makers face. As an example of an option graph Fig (2.7).

Furthermore, the diagrammatic option graph can be more elaborated to form a tree-like arrangement of any feasible combination of options containing any option from each of the decision areas within a problem focus (Table 2.4). This requires first to arrange the decision areas within the current problem focus according to a chosen sequence, by decision makers, and then to proceed logically through that sequence. The main objective of this arrangement will be to list a set of available decision schemes so that they can be examined further.

The decision scheme is the final stage of the designing mode, which is based on the shaping mode. Both the designing and shape modes are complemented by the comparing and choosing mode.



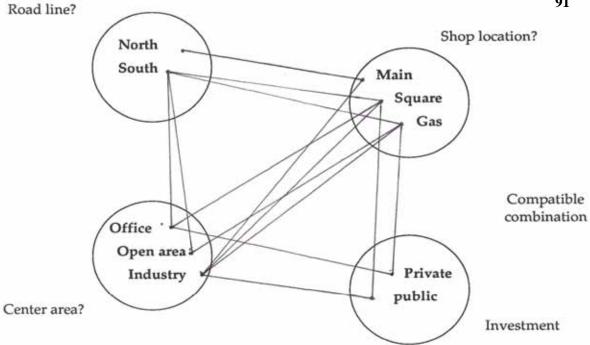


Fig. 2.7: An Option Graph

Table (2.4): A decision scheme

Road line	Shop location	Center area	Investment	Decision scheme
North —	Main — Square — *Gas	X Offices X Open space —Industry	x Private Public —	— Scheme 1
South —		Offices —/ XOpen space	Private — × Public	Scheme 2
	x Main x Square	└ Industry	Public	Scheme 3
	Gas	×Offices  Open space  xIndustry		
		x Offices x Open space - Industry —	X Private — Public ——	Scheme 4

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The research made by John Friend and Alien Hickling presents,(15) in comparing and choosing modes and concepts, the methods which address evaluation issues more directly than the concepts introduced to guide the work of shaping and designing modes. These evaluative issues are quite complex and differ according to different situations in practice.

### 2.3.7 Applying the Strategic Choice Approach in Practice

The traditional process of solving problems which is described as a linear process coping with some well-defined rules as how and when they can be applied, will be simple and easy to be taught. However, in practice this traditional process has many limitations specially in dealing with complicated problems with many integrated aspects and changing conditions.

The strategic choice approach offers a different method of solving problems. There is no one right way to apply this approach and there is no correct sequences in which to do things. It is all a matter of judgment as to what will be appropriate to the circumstances at that particular time. Every problem will be different, so each will be tackled according to its condition. In doing so the strategic choice approach will use any suitable concepts, modes, frame works, techniques, activities or media to achieve its objectives.

Applying the strategic choice approach in practice is based on two main ideas. The first will be the idea of selectivity, where it is important to choose carefully what to do and what not to do and how, with whom and when. The second will be the idea of adaptiveness, where in dealing with complex problems with many uncertainties it will be important to work in many ways, to select and adjust the way which can clarify or minimize the uncertainties in each of the problem aspects. These uncertainties can be about what the problem are, what the alternative ways of dealing with it and what to do about it.

<sup>15.</sup> Ibid, p: 51.

The strategic choice approach, developed by both John Friend and Alien Hickling (16), was based on practice experience through working with planners and decision-makers who were usually working under pressure, especially pressure caused by the shortage of time. From their experience two important lessons in choosing tools under pressure came out. The first was that if one cannot deal with everything adequately, he would better deal adequately with some things only. The second was that, in choosing which things to do, the process should always be steered in the direction where it is believed that greatest progress could be made.

The application of the strategic choice approach in practice will be managed according to four components: technology, organization, process and product.

**A.** Technology: aiming to manage the open technology in practice, through assisting and encouraging effective communication and interaction within a working group of decision makers. The technology of strategic choice is considered as an appropriate technology because it deals with whatever suitable concepts or methods to tackle any problem. Because it also facilitates the contribution of decision makers, with their diverse perspectives, participating in solving complex and confused problems.

Management of the technology of strategic choice needs a flexible physical setting for interactive working of decision makers such as room large enough to accommodate participants, wall space, movable chairs and one or more side tables for documents and equipment. This will cope with supplying the participants with adequate materials such as papers with different sizes, pens with various colours, slide projection; video there—is also a need for supporting services such as telephone, computer hardware / software and refreshments. Finally, there will be a need for techniques and skills to allow these resources to be used to good effect such as

<sup>16.</sup> Ibid.

Knowledge for relevant Working methods and concepts, skills in applying these selectivity and adaptively and practical knowledge in these problem areas and related fields.

**B.** Organization: aiming to manage the interactive participation of decision makers in practice. In this sense, it will be useful in managing the dynamics of a working group to organize and guide the participants' role. The larger a working group is, the more difficult it becomes to maintain an interactive participation through time. So, to make progress in this case it is advisable to give the participants the opportunity to form sub groups, to deal deeply with complementary aspects of the overall task, and then to bring them together.

The more complex the problem, the more difficult it will be to organize a working group and to define the role of each participant. In forming a working group it will be advisable to take into consideration the different roles that participants can take. It is not compulsory to give each participants one role, nor that all roles be filled. These roles can be labeled as follows:

- **Leader:** responsible for controlling the quality and quantity of the analysis and information input.
- **Coordinator:** responsible for developing the process and making sure that the right participants are at the right place and at right time.
- **Facilitator:** responsible for internal group relations, guiding interactive sessions and helping with grouping and linking.
- **Regular participant:** responsible for contributing effectively in the process and team member functions.
- Occasional participant: responsible for contributing in a specific area of the process as an expert

Managing working groups in the conventional manner can be inefficient as there will be many participants, with various aspects, involved in the process of decision-making without being appointed to a special role. Without defining their interest and aims in the decision-making process it will take a long time to reach a decision. Through using the strategic choice approach it will be helpful to think of participants in five prototypical roles in relation to the decision-making process:

- Those who are interested for the decisions to be taken in a broad political way, such as decision-takers.
- Those who are directly responsible for guiding the decision-making process, at a managerial or senior professional level.
- Those to which periodic reference will be made because they have roles in other fields of decision-making.
- Those that play a representative role in relation to specific interests which will be affected by the decisions.
- Those that are directly affected by the decisions such as residents or employees.

Thus, the whole task of managing the organization for strategic choice can be seen as a process of dynamic grouping and linking, in which there are many variables. It is not only a question of the people in which decision-making roles will be active, but of how frequently, in which combinations, and in what relationship they will be to each other.

C. Process: aiming to manage the learning process in practice by offering some further practical advice on how the strategic choice approach can be managed within an interactive working session. The research conducted by both John Friend and Alien Hickling stressed the importance of managing the time during the sessions and between one working session and another.

Thus, in evaluating the use of time through the choice process, it will be important to be guided by considerations to increase understanding rather than just keeping good time. The research defined in details the role of different participants in managing the process.

**D. Product:** aiming to manage the growing progress in practice through managing the output product of strategic choice process. This product can be both visible and invisible. Visible products will be managed through recording and

Clarifying these products as well as acting to produce them to the decision makers. Recording methods can include taking photograph of what have been achieved, making photocopying, taking notes or writing documentation. These methods will provide at anytime a statement of the latest findings and possible recommendations coming out of the work. While invisible products will include monitoring attitudes, opinions, group feedback and discussions.

### 2.3.8 The Meaning of Planning Under Pressure

The meaning of planning under pressure is to be trained to take decision under certain complexity of factors. Planning as a conventional discipline loses its context in the decision making process. The operational context of planning depends, therefore, on the way decision-makers work, think, compare, measure and evaluate the interaction between different factors. The experiment as briefly explained in this chapter reveals the need for organizing a decision making process in order to help the actors concerned put the right answer to any planning problem. This proves that planning is not only an operation process, but also it involves disputes between political and technical orientations. The management of the planning process and consequently the decision making process become an important factor in the implementation of plans.

### 2.4 The British Experience in Managing New Towns

#### 2.4.1 The History of New Towns in England

The idea of new towns was put forward by Ebenezer Howard in his book "Garden Cities of Tomorrow", published in 1898, as a solution to the problem of over-crowded slums and suburbs. The first attempt to put his idea into practice was made at Letch worth in Hertfordshire from 1903 onwards. Welwyn Garden City founded soon after the First War was built on the Letch worth experience and carried it further. In both, an effort was made to develop housing and industry side by side, so as to create a self-contained community. A full range of public services, cultural opportunities and leisure facilities was provided to all resettlers.

When the Second World War ended, there was a huge demand for both houses and jobs, especially in London. Sir Patrick Abercrombie recommended, in the Greater London Plan 1944, that a large part of this demand should be met by the establishment of ten satellite towns. Around the existing built-up area, a Green Belt was to be maintained. The new towns were to be sited in a ring beyond the Green Belt. The New Towns Act 1946 brought together the progressive housing ideas, of the preceding half century, and gave the government powers to carry this policy into effect. (17)

The objectives for which the machinery of the New Towns Act has been used are: (18)

- 1. To build new towns in order to take the "overspill" of people and industry from other towns.
- 2. To provide improved living conditions and variety of employment in areas of rapidly expanding industry.

<sup>17.</sup> Henry and Judith Paris, <u>Blackwell. The making of our New Town</u>, <u>Blackwell</u> Development Corporation, 1981, p: 12.

<sup>18.</sup> Peter Self, New-Towns-The British Experience, Charles Knight and Co, Ltd, 1972, p: 31.

3. To provide new housing and new employment in areas of declining industry.

4. To provide improved living conditions in areas of decaying mining villages.

Under the new towns legislation the ministers responsible for planning in England, Scotland and Wales (now the Secretaries of State for the Environment, Scotland and Wales) were given power to designate any area as the site of a new town. The legislation required consultations with local authorities and the public before a designation order was finalized. Once the order was made, a development corporation was set up. A new town development corporation consists of a chairman, a deputy chairman and not more than 11 other members appointed by the appropriate minister, and chosen for the relevance of their experience and knowledge. They usually include members of the elected local authorities in whose area the town lies. Every corporation appoints its own staff, including a team of officers under a general manager who are responsible for the day-to-day running of the corporation's program. (19)

A development corporation has widely defined functions and powers. Its statutory purpose is to secure the layout and development of the new town in accordance with proposals approved by the appropriate minister under the new towns legislation. A corporation has powers to acquire land, if necessary by compulsory purchase. It is authorized to carry out building operations, to engage in business undertakings and generally to do "anything necessary for the purpose of the new town".

A development corporation does not replace the existing bodies with responsibilities in the designated area. It works with the elected local authorities and other statutory bodies and arrangements can be made for the joint financing of basic infrastructure such as main roads and sewers.

<sup>19.</sup> Peter Self, New-Towns The British Experience, Charles Knight and Co. Ltd., 1972, p: 31.

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The frame work within which a development corporation puts forward particular proposals for development of the various parts of the new town for formal approval by the minister is the new town "master plan" which shows the general intended location of industrial, residential commercial and service areas and the main road network. New town master plans were in many cases drawn up initially by firms of planning consultants. The public, local authorities and other interested parties were consulted and public inquiries were held before the plans were put forward to the minister for approval. New town master plans have been revised as necessary in the light of changing circumstances. (20)

The new town development corporations are essentially temporary bodies. New towns legislation for England and Wales provides acts for their dissolution when they have completed their work and for the transfer of their assets. The commission for the New Towns was set up in 1961 to take over and manage new town property, and legislation in 1976 provided for the transfer to local authorities of new town rented housing. By 1983 the development corporations of eight new towns have been wound up and their industrial and commercial assets transferred to the commission. The new town rented housing in these towns has been transferred to the local authorities for each area.

The main function of the Commission is to manage the assets of land and commercial and industrial buildings transferred to it and to dispose of them when appropriate. It will continue to receive industrial and commercial assets from further new town corporations as they reach the stage of dissolution. It is intended that the Commission itself should eventually be wound up following the sole or transfer of its remaining assets in the 1990's.

<sup>20.</sup> Paper: <u>Britain's New Towns, Central office of Information, London, February 1984, p: 5.</u>

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#### 2.4.2 The Planning Process of New Towns in England

A study of the master plan for any designated new town would demonstrate the amount of research needed before the outline of the new town begins to take shape. The basic facts needed to start preparing a master plan include contours, geology, condition and function of buildings, ownerships, farm boundaries, Communications, population structure, climatic conditions, landscape or other Features, buildings to be protected or preserved, water and power supplies and other services, drainage and sewage problems, and the economic and social structure of the area. The concept of the new town to be built, its economic function in the region of which it forms parts, its possibilities and limitations, must then be shaped out and welded together into a framework that covers every aspect of development and life in the new town.

Calculation was made of the likely build-up of population, with age and household structure, future birth, death and marriage rates. At this stage it was only a statistical exercise based on carefully considered assumptions about such factors as the rate of industrial and commercial development, the building up of service industry, the density of employment and the distribution between male and female employment. On anyone of these questions, estimates may prove in the event to be wrong. (21)

Change in the economic climate, both national and international, can happen quickly and unexpectedly and the plan would be sufficiently flexible to be readily adopted or modified to cope with new situation. Perhaps the most difficult change of all was the decision, many years after a plan has been settled, to increase the size of the town, because so many aspects of a plan were calculated by reference to the projected population. Yet almost all of the first new towns have been instructed by the Minister to be built for a large population. This meant a very close re-examination of the structure of the

<sup>21.</sup> Frank Schaffer, the New Town Scary, Granada Publication Limited, 1972, p: 67.

town and its capacity to cope with the increasing demand, it was found that the early plans were capable of absorbing substantial increase in population.

Traffic circulation was of a particular importance. No master plan could be drawn up without extensive study of the traffic flow which the new town will generate at various stages of its growth. The road pattern should be adequate for the long-term development. For once the roads were put down there was little chance for second thoughts. Yet sometimes the second thoughts were forced on a development corporation by actions outside their control.

The land needed for industrial development to provide work for the people of the new towns could be calculated with reasonable certainty at the time, but the rate of future mechanization and its effect on both the jobs and the factory space needed was not readily predictable. Long-term calculations could therefore only be initial estimates. So, too, with shops. Changes in shopping habits, the development of supermarkets, the reduction in house delivery services, all had their effect not only on the number and type of shops needed for a given population but also on such matters as car parks and access.

The amount of land wanted for schools, open spaces, parks, sports and recreation grounds was to be worked out, although some of them, particularly the traditional "six acres per 1000 people" for open space, could well be reviewed. Hospitals, civic buildings, police, fire, ambulance and welfare services, churches, pubs, offices, community halls, had to be provided for; and most important of all come the decisions on housing (numbers, types, densities) with the related questions of garages and gardens and the degree of segregation of pedestrians from road traffic. The detailed design came later but the main principles governing housing layout had to be stabilized at that stage.

Finally came the program. The rate at which the new town would develop depended on many unknowns, but assumptions were to be made and

the program adopted at time goes on to meet changing circumstances. The building labour force available in the area would place a limit on the speed of construction; the attraction to the new town industry would settle the number of jobs and therefore the number of houses and shops needed each year; the economic climate would determine the amount of capital available. It would be some fifteen years or more before the program was finished and that was a long time ahead for predictions that were so dependent on unpredictable facts.

The planner had to look, too, to the final stage of growth. He had to try to estimate the age of the population that would be living in the new town fifteen or more years ahead, the number and ages of the children they would have, how many people would move away from the new town, and how many will stay, need jobs, marry and have more children. For these, the second and third generations, he had to leave room. It would be a slower rate of development going on possibly for thirty years or more before the population had settled down to a normal age distribution, but he had to work out the amount of land that would be needed for this "natural increase" and made sure that it was reserved.

There were no \*stereotyped sets of rules for Master Plans. Each new town had it own problems and each planner had his own individual approach. His ideas are subject to the closest examination and he had plenty of opportunities to explain them. He had to carry with him the development corporation, the local authorities and the regulation requirements, he had to give the general public the chance of criticizing or objecting and he had to satisfy the Minister. Most of the development corporation organizes exhibitions before the plans were submitted to the Minister. The exhibition furnished with screens, models, and maps as an aid of understanding. Members of the planning staff may be available to answer questions.

Some corporations held public meetings. Any point of substance raised could often be dealt with before the document was finally completed.

Perhaps the oddest thing about the Master Plan was that it was not required by the law. It had no legal significance and was not mentioned in the New Town Act. The Minister required it to be prepared, purely as an administrative necessity and he studied it and may comment on it, but he never formally approved it.

Yet master plan was the most important document in the new town process. It was the foundation on which the whole town rested. Most people thought of it as just a map, with colours showing where the houses, shops, factories, and schools would be built. But it was much more than that; it was a way of life, for thousands of men and woman and for their children yet to be born.

# 2.4.3 The Role of the Government in Managing New Town in England

New towns in England were the creation of central government. It was the Government which decided when, where and for what purpose a new town was to be built. The instrument for planning, developing and managing the new town, once the site had been settled, was a development corporation. But, the corporation was appointed by the Government and all its proposals for development had to be agreed with the Government. The role of the Government, in general was to: (22)

- a. Approve the master plan and any changes that may be made from time to time.
- b. Select the new town site.
- c. Settle the size to which the new town may be allowed to grow.
- d. Authorize compulsory acquisition of any land that cannot be brought by agreement.
- e. Control the rate of build-up.
- f. Determine what industry may be allowed to develop in the new town.

<sup>22.</sup> Peter Self, New Town - The British Experience, Charles Knight and Co Ltd, 1972. p: 40.

Supply most of the capital needed, by the corporation by ways of loans, at the current rate of interest, repayable over 60 years and maintain a tight hold over expenditure.

h. Finally, retain the ownership of the town once it is completely built.

The role of the Government, presented in the Secretary of State for the Environment was very obvious in managing the initial steps of creating a new town. The following procedures were usually achieved in designating the new town site.

- a. The Secretary of State for the Environment considered an area where he thought a new town development corporation would be set up according to the objectives of the New Town Act. This was followed by a dialogue between central and local government as to the general locality of the proposed new development but its precise area was kept open. The Secretary of State may invite professional advice from outside central or local government at this stage.
- b. After the Secretary of State was satisfied that he had sufficient information, from the pressure groups, local authorities and his technical advisers, he made a draft designation order for the area of the new town.
- c. A public inquiry was then held by an inspector appointed by the Secretary of State. The views of everybody who was interested were stated and discussed.
- d. The inspector holding the inquiry made his report with recommendation to the Secretary of State.
- e. The Secretary of State, in the light of the inspector's report and the evidence concluded at the inquiry, made his order designating the area.(23)
- f. The Secretary of State appoints the development corporation, the membership of which normally consisted of nine part-time members, a chairman, deputy chairman and seven others. Members of the corporation were paid. They were not necessarily appointed because of their expert knowledge, but one or more people always appointed from the locality where the new-town was to be built, so that the local view could be expressed in discussions at broad meetings of the development corporation.
- g. The effect of confirming the designation of the area was to make all land in the area subject to compulsory purchase. But the corporation, if it had to use legal

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<sup>23.</sup> Ibid, p.: 31

Compulsion should have made a compulsory purchase order which had to be confirmed by the Secretary of State. However, because the Secretary of State had already designated the area; the scope for objecting was very limited.

After the initial designation of the sites, the role of central government was, generally speaking, negative. It was just a matter of controls. The positive role was transferred to the development corporations which took over to build the new town. So, in spite of the close central government involvement in the development of the new towns, the new towns progress, their degree of success and their whole style would depend on the individual development corporations and their staffs. (24)

## 2.4.4 The Role of Development Corporation in Managing New Towns

The new town development corporation came into being by an order of the Minister appointing the corporation for the purpose of developing land specified in a particular designated area, giving it a name and setting out its constitution-a chairman, deputy chairman and not more than seven other members. The Minister's order did not at that stage appoint the members. It merely created the corporation as a legal entity able to enter into contracts, hold the title of land, take decisions and carry out the many other functions and legal processes necessary in the course of building a new town.

The development corporation was not the local authority. The existing local government administration, through elected members continued unchanged. The country council and the district council remained responsible in new town for all normal services. The development corporation had parallel power to build houses and roads, and can if necessary be authorized to provide water and sewerage Services.

<sup>24.</sup> Paper: <u>Britain. New Towns. Centrals Office of Implementation, London, February</u>, 1984, p. 5.

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It could also contribute to the local authorities costs. But it could overlap with the general run of local government functions. (25)

The Minister was answerable to Parliament for the activities of the development corporations and for this reason he had complete control over what they did and what they spent. The local authorities were consulted on all development proposals and their views were carefully considered but the decision rested with the Minister whose approval carried with it a planning permission. But, although all development projects had to be approved by the Minister, the corporations were given a good deal of freedom in the way they organized their affairs and conducted their business. It was a semi-independence which they appreciated.

The appointments of the chairman and members of a development corporation were made by the Minister and he was free to select those he liked, up to a maximum of nine. The one statutory qualification was that he ought to try to find at least one "Local" member. If he didn't succeed: the New Town act merely said that he ought to" have regard to the desirability of securing the services of one or more persons resident in or having special knowledge of the locality in which the new town would be situated". Similarly before making any appointments the Minister ought to consult the local authorities; but he was free to ignore their views if he wished. In practice, of course, suitable men or women were usually found and suggestions by the local authority were welcomed and frequently accepted. (26)

In many ways the role of the corporation members was similar to a board of directors. It is true that corporation member's work had a social aspect. Making profit was not their primary objective. They were expected to pay proper attention

<sup>25.</sup> Frank Schaffer, <u>The New Town Story</u>, Granada Publication Limited, 1972, p: 53.

<sup>26.</sup> M. Haggarty, <u>The New Towns</u>, The New Towns Association, 1981, p.2. Copyrights ©:: Center of Planning and Architecture Studies:: All rights reserved. www.cpas-egypt.com

To economic factor in order to secure a reasonable repayment of the capital investment and to organize the building of the new town with regard to economy, public policy, and the needs of the people for whom they were built.

Above all, members of Development Corporation ought to work as a team. They may have different views about many things, different approaches to problems, different political and social philosophies, but they have to be capable of discussing and managing these differences in the interest of building the best town. Equally important, they ought to get and keep on good terms with the local people and in particular with local authority; and good relations between the staff and the local officials were even more vital. In many new towns this was not easy.

The key position to a development corporation was the chairman who ought to be diplomat, democrat, and administrator rolled into one. He ought to keep a strong hold of the policy and at the same time avoid unnecessary undue interference with the day-to-day work of the staff, and be able to understand technical details and settle important issues without trying to do the job of the architect, engineer, or other professional advisor. He also ought to have confidence in the staff and they ought to have confidence in him.

Corporation membership was a part-time appointment. It was not an executive job. Formal meetings may not be for more than once or twice a month, although members frequently participate in the occasional functions or joint meetings with the local authority or some town organization and take an interest in the life of the town. The fact that they did not have to stand for election relieves them from the need to approach and collect voters and enables them perhaps to take a more detached approach to the problems than the average local councilor does. The status in the new town with a development corporation did not differ greatly from that of any private building organization carrying out large-scale

Development or many other statutory bodies who provided gas, electricity, rail, postal, and other services in the new town.

The first job of a development corporation was to appoint the key staff. However able the members could be, the success or failure of a new town depended greatly on the quality and keen interest of the staff and the ability of the corporation to pick the right people for the job.

All development corporations had substantially the same staff structure. At the head was a general Manager who was the full time chief executive responsible to the corporation for the whole work of the organization. He had to be an excellent administer, co-ordinating the views and activities of the professional team, organizing the office, ensuring that the program of planning and building went along smoothly and in time, with proper economy of staff and money, also, maintaining communication and good relations with the local authorities, government departments, churches, social groups, employers organizations, trade unions, political parties, and a host of others who were concerned in one way or another with the new town.

The senior professional staff operated as a team under the general manager's direction, and usually cover the professions of: planning, architecture, engineering, estate management, housing management, finance, law, administration, public relations, and social development, each supported by adequate staff of the right quality for the work to be done. At the height of their development program a corporation may need a staff of several hundred people, but the number varies, of course, with the size of the new town. (27) Sometimes, consultants were engaged in preparing the initial Master Plan.

<sup>27.</sup> Ministry of Reconstruction, <u>New Communities</u>. <u>Housing and Utilities</u>. <u>New Towns</u> - Shining marks on the Map of Egypt, December 1989, p: 2S (In Arabic).

Private architects or engineers may also be brought in for particular projects or housing schemes, thus contributing to variety of design. Landscape consultants were sometimes asked to advise on planting schemes, the layout of parks and open spaces or the preservation of trees and woodlands. Quantity surveyors were also appointed for particular contracts. But most of these professions were usually represented on the corporation staff as well, so that the whole range of professional and technical advice needed in the task of building a complete town was available from the corporation's own staff and any consultant engaged for particular project work in close contact.

Most of the actual work of building was done by contractors through the ordinary process of competitive tendering.

Many corporations had their own maintenance organizations as the number of houses and other buildings owned by a corporation increased. It became very important to have ready and efficient means of carrying out both routine maintenance and emergency repairs. Some towns relied on the builders in the area but others have found it more effective and more economical to run their own labour organizations for this purpose.

New town salaries and the general level of staffing were controlled by the Government but the appointments were the sole responsibility of the corporations. This semi-independence in fact ran through the whole new town system. The salaries of general managers and chief officers were related to posts of comparable responsibility in the top grades of civil service.

The corporations were responsible to the Minister and were subject to his direction. Formal directions were very rare. There was however a steady stream of guidance or instructions from the Ministry on current policy issues, and each town had to submit an annual budget. But even within the limits of an approved budget There was no complete freedom to operate.

In theory the corporations could plan and develop the new town according to their own ideas, but for every major item of expenditure and every development proposal they had to get the Ministry's approval and the Ministry ought to get the approval of the Treasury. This close financial control had long been an issue of discussion. (28)

However strong the desire of the corporation members to be independent and free to get on with the job, they had to accept that there were many other people who may be affected by the new town and who have a very real interest in what was going on. Consultation and co-ordination was an essential part of any building operation on this scale. The development corporations did not have to apply for planning permission that was approved by the Minister. But the various local authorities ought first to be consulted and the corporations had to get approval under the building regulations. Discussions could take a long time. Many Government departments and other statutory bodies were involved in such questions as roads, schools, churches, industrial development electricity, gas, and other services, river control, hospitals, and health centers, and it was not an easy task to negotiate proposals with all the bodies concerned.

With the increasing number of new towns, however, further steps were felt to be necessary to ensure efficient co-ordination. In 1970 the Chairmen's Conference decided to strengthen the organization by establishing a central Standing Committee consisted of a small number of Chairman and General Managers for the purpose of pooling information and considering joint action on matters of common interest. At the same time they set up a permanent secretariat called The New Towns Association. They have achieved coordination without sacrificing independence.

<sup>28.</sup> Peter Self, New Town-The British Experience, Charles Knight and Co Ltd. 1972, p. 44.

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# 2.4.5 The Role of New Towns Association in Managing New Towns

In the first phases of developing new towns the corporations were disturbed by the amount of discussions that had to go on before any progress could be made. Side by side with the desire of the various development corporations for freedom and independence was the need to recognize that they were all part of one new town "movement" and they ought to make arrangements to co-ordinate ideas themselves. Many corporations faced similar problems and it was a waste of staff time if each town had to make a separate investigation. The experience of one would be available to all. (29)

Although the New Town development corporation and the commission for the New Towns were responsible separately to their Secretaries of State but they shared common concerns. So, to study problems and consider solutions, the chairman of the development corporations and of the commission met in the new towns Chairman's Conference. Their chief executive met similarly in the new towns General Manager's Committee. These two bodies, together with a standing committee to deal with day-to-day matters, constitute the New Towns Association. (30)

Through their association the development corporations and the commission acted in harmony on planning matters, on proposals and preparations for legislation, on the interpretation and application of legislation, and responded jointly to consultation initiated by the Secretaries of State, their Ministers and Parliamentary Secretaries and their officials in Government departments.

The New Towns Association maintained a small secretariate in London to co-ordinate and services its activities, to facilitate contact (thus giving each development corporation a further channel of access to the others' advice) and to focus the new towns' expertise in planning and engineering in housing, in

<sup>29.</sup> Frank Schaffer, The New Town Story, Granada Publication Ltd, 1972, p: 63.

<sup>30.</sup> M. Haggarty, the New Towns, the New Towns Association 1981, p: 60. Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

Development finance, and in the administration of the development machine. The Association secretariat had become a data bank of fact and opinion over a wide range of matters of common concern to the new towns. It communicated with other institutions and organizations and services, conducted meetings between some of them and the General Managers Committee.

Every month the Association published the New Towns Bulletin carried brief notice of Parliamentary, Government and other official action influencing the development of new towns and reports briefly on progress and development in the new towns themselves.

# 2.4.6 The Role of Commission for the New Towns in Managing the Development Process

"The Commission for the New Towns was established in 1962 under the Ministry of Housing and local Government, now the Department of the Environment. Since then, its role within the new town movement was clear. It will take over from the development corporations in new towns when their initial growth periods have been substantially completed, will continue to manage and develop, as necessary, and generally will help these new communities to make the transition from "new town" into normal town. (31)

In 1978 housing responsibilities were transferred by the commission (and most of the remaining earlier development corporations) to their local authorities. At that stage, however, the commission still had a relatively clear and positive role to continue to manage and develop the commercial and industrial properties in its existing towns and gradually to take over the same role in other new towns as the development corporations completed their work. The commission had to take over its role with a view to dispose of property so transferred and any other property Held by it. Until, disposed, the Commission had to maintain and enhance the value of the land held and the return obtained from it.

<sup>31.</sup> Report; <u>Commission for the New Towns.</u> Background Briefing G, Herrietta Ayres-London, P: 3.

The principal assets of the new towns were: housing, community assets, and commercial, office and industrial property and land. The responsibility for housing and community assets were transferred to the local authority (councils) or appropriate organization (Fig. 2.8). Therefore, the Commission of New Town prime responsibility was the management and the orderly disposal of the commercial property and land.

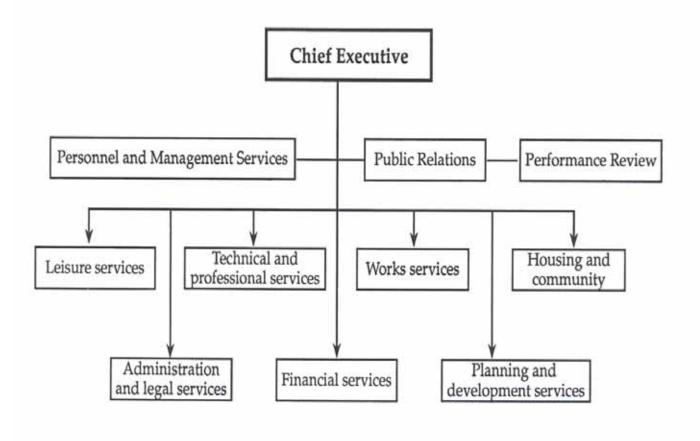


Fig. 2.8: The Management Structure of the Welwyn Hatfield council (local authority).

In 1979, the Government decided to ask the Newtown Corporation and the commission to start selling off their industrial and commercial property assets. The commission activated this role under the following principles:

- Existing tenants should be given the first opportunity to purchase.
- A fair market price must be obtained.
- A market's capacity to absorb sales must be taken into account.
- Ownership should be as widespread as possible to ensure no one dominant landlord.

Although the Commission interests were gradually being reduced by the sales of assets, the commission was responsible for the new town centers and industrial estates, together with some smaller district centers, development and agricultural land (32). Its prime duty was to manage these estates on a commercial basis, turning the assets to good account, within the context for each new town of the purposes and objects for which it was established. As an example, in each new town the commission, as the landlord of most or all of the town center, had managed its estate on a comprehensive basis. This means that, in support of selling and shopping, it had undertaken a wide range of other responsibilities including the maintenance of landscape and the provision and management of common services. These services provided by the commission contributed to the overall attractions of the centres and the costs involved had been justified in terms of enhanced values and rents.

It is worth mentioning that the commission's Headquarters was in London with offices in new towns. Commission members were appointed by the Secretary of state for the Environment and it was run by a full-time Chief Executive with a total number of employees of over 1000: each new town office was run by a senior officer directly responsible to the Chief Executive.

<sup>32.</sup> Commission for the New Towns, <u>Report of the Commission for The Newtown's-for the period ended 31st March 1981</u>, Her Majesty's Stationary Office, p: 7.

## 2.4.7 The Role of Public Participation in Managing New Towns

Public participation in developing and managing new towns was limited and ineffective. This was due to three main inappropriate features in the new town's approach to public participation in the development process:

**First,** the plans were made to the public late in the planning process and offered information, not alternative solutions and involvement in the decision making. There was little opportunity for the public to influence the development plans and to select from successive draft plans. Most new towns master plans were exhibited for the public just before, or even after, the submission for approval.

**Second,** the plans exhibited to the public focused on physical results on the plan's land use and layout-and not on the needs to be met and problems to be resolved. Also plans didn't define what choices will be available for the public, who was going to do what and at what time.

**Third,** the plans were presented in a language that was difficult to understand (maps, abstract diagrams) and in situations (formal exhibitions, meetings) which severely constrain the interaction between planners and public.

However, two major positive trends seemed to be emerging. One was the concept of planning for client groups, and the other was the issue of continuous participation.

In the concept of planning for client group, key groups and their requirements were identified, and new town plans were evaluated from their various view points. With this approach three transformations affected planning:

**First,** instead of a generalized plan, the plan became an instrument for meeting and balancing clearly defined client needs.

<sup>33.</sup> Trevor Macmurray, <u>New Towns Participation</u>, Town and Country Planning, January 197

**Second,** it provided a structure for gathering and analyzing client needs and reactions to the plan, specifically, the planner began to realize how inadequate was his data and understanding of urban systems.

**Third,** it provided a language for communication between planners and the public. The plan could be explained in terms of precisely what it would achieve for each group and what was their role in developing their new town.

Client group planning concept, if carried out effectively, could overcome the difficulty of some participation exercises, particularly in large scale plans.

A further major trend was the issue of continuous participation. Public participation usually takes place in case of major changes. Little attention had been given to the need for participation in issues that arose after the completion of major developments which were critical to the ongoing life of the community. With continuous participation by a well-informed and organized public, the lead for action could come, positively, from the public rather than through corporation initiative.

Continuous public participation in managing new towns could be done through: talks and slide-shows to groups and resident's associations on the new town and its future, permanent exhibitions, information centers providing an opportunity to both help and learn from the community, new town newspaper, and surveys to get views of the town's maturing environment. This kind of performance appraisal could help set direction for future design, and establish continuous participation as part of a the new town management process.

Public participation in the planning and development of new towns, and more continuously in their management, would depend on effective organization of residents to articulate and represent their views, and on channels of communication between planners and the public.

This could be the task of public relations and community development officers, carried out by general contact with the community, and by setting up residents associations.

New town corporations were, of course, appointed and not subject to residents votes. Thus, there was no process of representative democracy to Influence the important physical development of the new town, although the process did influence services provided by local authorities, such as social services and education. So through local authorities, public participation in the physical planning of new towns could have special means of extending control by the public in planning decisions.

### 2.4.8 Lessons from the New Towns Experience in England

Since 1947 England had a strong planning system, and not before that. The Town and Country Planning Act set up the main and essential futures of the planning system. That Act was changed several times but the main essential futures stayed the same. The main planning agents were the local governments, and not the central government, so in local governments most planners work. It is a democratic accountable system. Local government has been elected by the people living in local areas. So planning was a partnership between local politicians (community) and professional planners. Most of the effort and laws achieved by local government was to control changes and the organic growth in existing towns and cities, very little time was spent in thinking about creating new towns or new development areas. The vast majority of planning was about improving the quality of life in existing towns and cities. (34)

After the Second World War, with the result of great damage in existing cities and enormous population growth, there was a program to build

<sup>34.</sup> A lecture by: Norma Burnett, Principal Lecturer in Department of Town and Country Planning, Bristol Polytechnic-England, On: <u>Urban Planning in England</u>. At Ain Shams University-Department of Urban Planning, 1990.

new towns around London and other big industrial cities such as: Liverpool, Glasgo and Scotland. But that took about 20 years which will be considered a brief and small period in the history of planning life in England. And then they stopped and the last new town was Milton Keynes which was planned in the early 1970's and now it is not a feature of their planning system. So, there is no more new towns.

Previously, a very important part of the planners' job was to control private sector development. Most of the land in England is owned by the private individuals, while the state owns very little land. So, most of the process change came from private capital and private developer proposing to build a factory, shops or houses. The planner job was to control the market on the behalf of the state and in the general public interest.

The planning Act in England requires to have plans to cover the whole country. Plans were from two levels, first the central government produce broad structure plans, second the local government produces detailed plans for its locality; using zoning methods in defining land use with different colours indicating different functions of land use, coped with proposals for developing different local areas. Local government plans were very rigid and restricted to the law in defining land use, these plans were made for long term of 25-30 years ahead.

New towns were set within a general planning framework to stop and control growing big cities such as London, and to resettle overspill population in new towns round big cities. The relation between plans and development control was very important. Planners produced the plans with zoning all the land uses. The planning Act restricts and controls using the land, which is mainly owned by private sector. So owning a piece of land doesn't give the owner the freedom to use his piece of land as he likes. The land owner can only use it in the way the plans say.

Therefore, plans, prepared by the state and supported by the law, were mainly political because they control the land value. They even control the kind, shape and the facade colour of any house to be built in a land zoned as a housing area. Moreover, any extension of houses in the back area of the house for more then 10% of the area has to get permission. Permission has to be done through submitting an application to local authorities and they decide whether it agrees with the plans or not.

Nowadays the basic planning system is still working, what have changed is the kind of plans produced. After reviewing and evaluating the achievements done by the local government plans, it was found that the system of making long term plans, with restricted zoning for land use and coped with rigid definition of land use didn't work as was expected. So the planning Act began to change the kind of plans they produce. Due to many economic problems, unemployment and lack of money and investments from central local government, and as plans were connected and relayed on those money and investments to implement and manage the plans, planners began to recognize that they cannot develop and control their plans relaying only on public money. Therefore private developers were welcomed to have a chance and a share in developing those plans.

However, private developers and specially industrialists, seeking for profit, had many demands and requirements such as selecting their industrial sites. They search for cheap sites, easy to be developed to locate their industries. But due to economic problems and high unemployment, there was a great demand for more industries and more jobs. Consequently local government and local politicians, who are elected by the community, found many pressures from their voters. So planners began to change their plans dramatically according to the industrialist demands, they gave them incentives to attract their industries and to increase job opportunities in their locality. Economic constraints reduced planning control.

Moreover, there have been many changes in social and economic pattern of life which the planners didn't predict. It will be extremely difficult for planners to predict the future because of the many unseen factors and changing conditions which could occur and affect the plans. As an example: increasing car ownership and the great expanding in road network affected the main objectives of creating new towns. New Towns were built to be self-contained, to shorten the distant between work and houses, so that residents could live and work in the same place. But due to the previous unexpected changes new towns became a "Satellite", a Place to live in only and to work in London or other big cities. It was found that about 70% of the people living in new towns around London work in London.

Another example for the uncertain factors and changing conditions that affected new towns, and planners didn't predict, was the issue of shopping center relocation. Previously, new towns were planned with central shopping center and small local shops in residential areas around the city center. The plans focus was toward the city center. But due to the increasing number of car ownership, welcoming private developers and changing the shopping habits of the residents, the traditional shopping system began to change. Private developers preferred to allocate their new shopping centers near the motorway, specially where motorway intersect, where they could get more profit and where many residents have an easy access to them. These new shopping centers were very huge with parking area for over than 1000 cars and it will be impossible to provide such an area in the city center to locate it, but that was feasible in the edge of the city near the motorways. Besides, the residents' habits and interests have changed, instead of buying things day-byday from near local shops they began to make a weekly shopping from the new shopping centers using their own cars. So, plans have to be changed to suit this unpredicted new economic style. Planners began to provide shopping zones in their plans with respect to private developers requirements.

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Each new town became conscious of the issue of attracting and stimulating private developers to their localities through providing them with incentives and facilities. On the other hand, as the whole new system depends on the car, planners began to wonder if this new situation of spread urbanization will last or not specially if the fuel price will get up.

Accordingly, it was obvious that the experience of new towns in England, which lasted for more than twenty years, proved that long term plans, trying to control everything and rigid plans haven't achieved what was expected to be done. Planners designed the plans, down to the last detail, depending on many Assumptions and according to their prediction of what will be going in the future. They presented their proposals in form of maps (master plans) and reports, that would look good on paper, but unfortunately, they couldn't cope with social and economic changes that occur frequently.

Therefore, recently, planners begun to change their plans. These plans became more written documents than drawing plans. Planners begun to write and define the broad goals and objectives of the plan and then frequently, every five years or less, review, evaluate and change their plans according to what changing conditions that had happened. Broad objectives are written through community politician and developers participation in defining them. These objectives could be changed through time to suit changeable conditions that will occur in the future. It became important that planners have to monitor, and check what is going on; where the developers want to go and where the problems in the city occur. Management of urban development operation became an important issue. Planners must have continuous discussions of what the plans have achieved and what to do in the future and, will the plans functions for the next period or it have to be changed. So, there is no more long term plans but only short terms plans as plans could be changed constantly.

### Chapter Three: The Egyptian Experience in Development Management of New Towns

- 3.1 History of building new towns in Egypt.
- 3.2 The National Urban Development Strategy in Egypt.
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# 3. THE EGYPTIAN EXPERIENCE IN DEVELOPMENT MANAGEMENT OF NEW TOWNS

### 3.1. History of Building New Towns in Egypt

Building new towns in Egypt dates back to the ancient era, as Memphis was the first town in the world, when King Mina united the two countries, and chose such a central location as a capital for his kingdom. As also Tel-el Amarnah was the oldest town which was planned by the pharaohs, and was divided into three sections, the first for the ruling family, the second for the clergy and the third for the people.

The first new town built during the Islamic era was Al- Fustat, which was founded by Amr ibn Al-'Ass after the conquest of Egypt. Then Al-Fustat was expanded, during the Abbasside period, by adding a new section in the northeast to be a station for the commanders, and a camp for their armies, and so it was called Al-Qatae'. The next step was another expansion, towards the northeast too, namely Fatimid Cairo, which was built by Jawhar the Commander

Salah el dine EI-Ayyubi and his successors were great builders, who raised the wall surrounding Cairo and the Citadel. Urbanization expanded during the period of the Memlukes so that Cairo, Fustat and Al-Askar became one city. There, hundreds of buildings including palaces and mosques were set up, most of which are still existent up till now.

The growth of the city continued and boomed during the period of Mohamed Ali, where many roads were constructed, Shoubra quarter was constructed and many factories were set up. The period of Khediwe Ismail was distinguished by modern buildings and long extended roads in the European Manner.

Moreover, many urban areas were built of which Ismailia and Abdeen are such examples. Two bridges across the Nile were also built. (1)

The opening of the Suez Canal in 1859 had been accompanied by the foundation of both Ismailia and Port Said as two new towns, in addition to the regular growth of Suez city. Ismailia and Port Said were influenced by European planning due to the existence of foreign staff in the Suez Canal who were living in both towns, thus giving them a distinct character which is still maintained in some areas up till now.

By the beginning of the twentieth century in 1905, the suburb of Heliopolis was built in the eastern desert. It developed rapidly due to the fact that it was linked with the city by a road and a train line. During the same period the suburbs of Al-Marg, Al-zeitoun and Al-Mataryah also appeared. Urbanization expanded also on the west bank of the Nile after being linked with the east bank. Hence, the areas of Zamalek and Dokki grew and extended to what was known as Madinat AlAwqaff. Furthermore, Madinat Nasr is considered the largest expansion Cairo ever witnessed in the sixties. Its area was about 12 square kilometers. and it was planned with a view to cope with the increase of demand for lands, as well as to avoid building on agricultural lands. (2)

Following the glorious October war, emerged the urgent need for reconstruction of the Suez Canal area, including its three cities Port Said, Ismailia and Suez, which suffered from the war. Thus this became the first large-scale experience of development and town reconstruction at present.

**<sup>1.</sup>** Ministry of Reconstruction, New Community, Housing and Utilities. <u>New</u> Towns-shining marks on the map of Egypt. December 1989, p.32 (In Arabic).

**<sup>2.</sup>** Ref.: Talaat Demerdash Ibrahim. <u>Feasibility Study of New Towns Building in Egypt.</u> (Doctorate Thesis). Faculty of commerce, Zagazig University, 1990, p: 15 (In Arabic).

The reconstruction experience of the Canal cities has shown that urban development cannot be separated from other aspects of development, since urban development is a real reflection of economic development and social conditions in a community. It has also shown that if development is the realization of a better economic, social and environmental condition, planning is the sound scientific way for realizing this through optimum investment of resources. The exact determination of alternatives and choosing the proper one is done in the light of different potentialities and circumstances.

Egypt has made use of the British Know-how in planning and reconstructing the Suez Canal cities, of the American know-how in setting up the EI-Sadat town, of the Swedish know-how in setting up the 10th of Ramadan town, German Knowhow in setting up both 15th May and EI-Ubour towns, Dutch know-how in setting up the Bourg El-Arab town and finally the French know-how in the new urban settlements around Greater Cairo. In all these cases it was possible to adopt the foreign experience to cope with the local conditions.

The Egyptian experience has been able to make use of all such world experience and to enrich its thinking, in order to set up its own theory of developing new towns. That was clear in the studies which the Egyptian experience made of planning without depending on others, as in the case with the towns of 6th October, New Domiett, Badr, New Beni Suef, New Al-Minya and the urban settlements around Greater Cairo (Fig. 3.1).

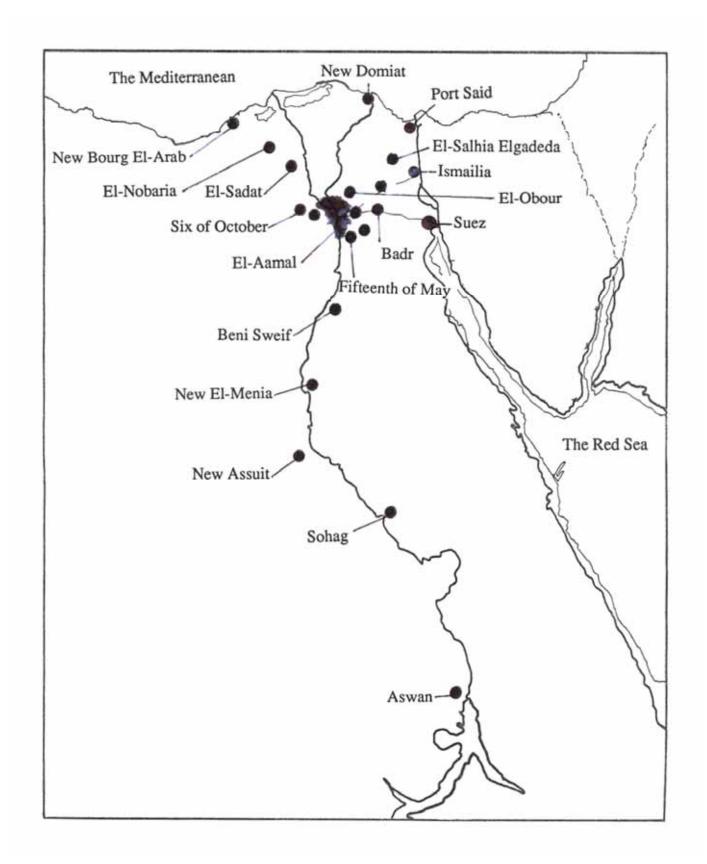


Fig. 3.1: The Location of the Recent New Towns in Egypt

#### 3.2. The National Urban Development Strategy in Egypt

Egypt as a developing country faces a lot of problems and challenges, among which, there are two main problems. There is a rapid rise in population and a heavy concentration in the urban areas. The rapid rise in population hinders the efforts of development and absorbs any production. The continuity of emigration from rural area to the urban areas leads to increase in population in the urban areas, which is accompanied by urban expansion over the agricultural land.

The population problem in Egypt can be examined from three angles. (3)

- The rising average increase in population is the first to be discussed. The total population in Egypt at the beginning of the twentieth century in 1907 was about 11 million people. Such amount has doubled four times until it reached 44 million in the year 1981, that is, in the course of 75 years. Then the population became 53 million in 1988. It is expected that in the year 2000 the average population will be around 70 million people. The proportion of urban dwellers to the total amount of population is now about 46%, while it was not more than 17% in the year 1907.
- The increasing population density in both the Delta and the Valley is next to be discussed. The two constitute the inhabited local space, which is about 4% in proportion to the total area of the Republic. Since there are now more than 50 million people living together, the density of the population in the Delta and the Valley amounts to 1250 personjkm2. It is considered one of the highest densities of population worldwide, while the density of the population in the remaining area is about 2 personsjkm2. The analysis of internal migration of population has demonstrated that both regions of Cairo and Alexandria still prove attractive to the major productive internal migration, as a result of

**<sup>3.</sup>** Ref. Ministry of Reconstruction. New Communities, Housing and Utilities New Towns-Shining Marks on the Mao of Egypt, December 1989, p: 16 (In Arabic).

Administration, production and services concentrated in both, so much so that population density in the city of Cairo has amounted to about 29000 person / km2.

3 The third point to be discussed is the decrease in agricultural land, which is the main source of food, at an annual rate of about 60 thousand acres. This was the result of random and informal spread of urbanization over the agricultural land.

From the former points one can realize the problems caused by the population explosion. The population concentration in the limited area of the Nile Valley and the Delta along with the migration-towards-the-city problem made it necessary to set up an Urban Development Plan to cope with this problem. This is to be done keeping in mind the need to re-distribute population and to draw out new maps for Egypt. This should be done in such a way that ensures the optimum means for exploitation of natural resources, the opening up of new vistas of socioeconomic development and the bringing about of better living standards for the average Egyptian in well-integrated urban environment.

Thus the average Egyptian living in these so-called new communities becomes aware of the social and environmental facilities offered to him, enabling him, therefore, to participate in improving his standard of living.

According to the previous statement, the National Urban Developing Plan (1978-82) depends on three means in order to achieve its general targets. These means are as follows: (4)

- 1 Reducing the population in the overcrowded areas, and evacuating other over populated ones to new areas.
  - **4.** Ref.: Mohamed Gamaluddin Mohamed Ahmed, <u>Importance of the new Communities and towns in cODin2 with the Urban 2rowth</u>, seminar on urban expansion, its motives, problems and urban development policy (26-28 Dec. 1988), Institute of National Planning, Cairo.

2 Building new settlements and towns on a well established economic base, so as to attract investments and people from overcrowded areas.

3 Exploiting uninhabited but rich-in-resources areas in order to attract more People to venture there. Thus decreasing the pressure on other thickly populated areas.

On the base of these three main means to achieve the National Urban strategy, the general targets for such strategy were determined. They are divided into two main parts, the first is to raise the productive capacity of the national economy, and the second is to improve the general living standards. The means by which these targets can be met is explained as follows:

#### First: increasing the production capacity of the national economy.

This can be achieved through the following means:

- a) To maintain the agricultural land and protect it against urbanization
- b) To nationalize the policy of industrial settlement by carrying out industrial Projects in certain areas specially aimed for these purposes and closely located to their raw materials.
- c) Organization of urban fabric with the view to reduce waste of time and costs of goods and people transport
- d) Realization of the optimum use of the existing infrastructure facilities and guarding against their deterioration.
- e) Protection of historical and archaeological areas considered a sign of human heritage and a likely source of tourist income
- f) Making use of available resources in the desert areas and carrying out infrastructure projects in these areas.
- g) Raising the private sector contribution for production, by carrying out projects in such new areas, after accomplishing their basic utilities.
- h) Achieving a balanced regional development.

### Second: Improvement of the living environment, through achieving the Following:

a) Realization of decentralization of urbanization by restricting urban growth in existing urban areas.

- b) Supplying the land necessary for building dwellings, for replacement and renewal and the improvement of a family's average share in dwelling units.
- c) Improving the average use of public service projects. d) Improving an individual's average share in the public utilities, and its efficient operation.
- d) Protecting the environment against pollution by controlling all sources of pollution.
- e) Re-planning old areas in the cities to make them feasible for development.
- f) Presenting water supplies by reducing the wastage in their network.
- g) Reforming national demographic charts and reducing population density in thickly populated areas.
- h) Setting up places for recreation.
- i) Raising the average income of the individual as a result of his rising productivity and all-around general increase in production.

It is evident that the urban development strategy of the State depends basically on the policy of creating new urban communities in Egypt. These would aim at attracting, settling the population, providing working opportunities, services and housing for those in the new towns. Achievement of this strategy is only possible by the presence of attractive factors in the new towns, and a corresponding repulsive factors in the existing cities, most important of which is Cairo city.

Cairo has many attractive factors which should be analyzed in order to find the means to create repulsive factors in the city. (5)

**<sup>5.</sup>** Ref.: Ezzat El Sadani <u>"E2vDt is Cairo. and Cairo is all E2vDt"</u>, AI Ahram, 19/8/1989, p.3 (In Arabic).

### The attractive forces in the city of Cairo include the following:

1 The population of Cairo averages 12 million which constitutes 20% of the total Population of the entire Republic (the population of Egypt is 55 million people). Greater Cairo is inhabited by 25% of the total population, which gives Cairo a distinguished position in the Republic, along with an influential social and political impact. The decision-makers in all fields and activities are concentrated in Cairo.!t is here that they get subjected to the pressures and claims imposed on them by the Cairenes. Therefore there must be a call for decentralization in adopting executive decisions, in addition to giving prime importance to the development of new follows\$

- 2 The availability of food supplies for the Cairenes is another problem. Despite the fact that the population of Cairo represents 20% of the total population of the country, they consume 50% of the total food supplies for the entire population (flour, bread, sugar, eggs, rice, lentil, vegetables, meat). This leads to unequal and inadequate distribution of food supplies. Therefore, there should be an equal distribution of food supplies in accordance with the population distribution on the national level. In addition to this, extra subsidized goods supplied to the new towns will act as a factor of attraction.
- 3 The availability of educational opportunities for the different educational levels and field types.25% of the students of the Republic are enrolled in Cairo schools, and 50% of the university students are enrolled in Cairo universities, since in Cairo there are five universities, four Egyptian and one American. This calls for transferring some colleges or building new universities in the new towns to support them, thus creating an attraction area for the population. The closest example is the transfer of Zagazig University from Zagazig city to Belbis city which lies in a desert area.

4 The availability of means of transportation in Cairo. On the streets of Cairo every day, moves 3000 buses, mini buses, metros and underground (used by 2 million passengers a day), which are in constant motion.

In addition to this, there are 500 thousand cars, 100 thousand private cars, 100 thousand public or governmental cars, 15 thousand service cars, 30 thousand trucks and trailers and 150 thousand taxis. This reflects the increasing need for the different means of transportation in Cairo city, which in itself, is a factor of attraction. Therefore, there should be an increased interest in supplying the means of transportation and communication inside the new towns. These should then be linked through a fast network of roads and better means of communication with the existing population centers adjacent to them, particularly the highlypopulated cities. This aims to facilitate population influx to and from them, particularly in the initial phases of construction of the new towns, which are in need of distant services, and yet still not achieving self sufficiency of services and recreation. The best example to illustrate the impact of providing means of communication in the new towns and transferring them into population-attraction areas is what happened at the beginning of constructing Heliopolis suburbs in 1910, where it was connected with the white tram to the city of Cairo. The fare was subsidized, which encouraged people to visit the area, and to settle there later.

5 The availability of medical services and care: In Cairo there exists 75% of the total number of the well known physicians and experts on the national level, 84% of private and investment hospitals, 85% of the sophisticated medical equipment and the advanced medical means on the Republic level. This demonstrates that Cairo is furnished with plenty of services and medical care. The concentration of the medical services in Cairo shows the inadequacy of the distribution of the Health Services on the National level. This calls for transferring hospitals to the new towns to benefit the citizens of these towns.

If this is done; the distinguished and subsidized services will act as an attractive factor to these new towns, thus reducing the pressure on larger cities.

6 The availability of work opportunities, housing and services in Cairo is more evident than in the remoter areas. This again offers an attractive factor for Cairo, especially for rural dwellers. Cairo receives annually around 370 thousand people, the equivalent of 1000 persons per day.(6) This calls for concentrating efforts to provide work opportunities, housing and services in the new towns to attract more population. Legal measures also should be taken to limit work opportunities, housing and new services in Cairo, in order to reduce factors of attraction. It is worth mentioning that 40% of the total work opportunities on the national level exist in Cairo. In addition to this, Cairo's share of the dwelling units built by the State is 30% of the total dwelling units on the national level. This reflects the inadequacy in distributing the national investments on the different regions of the country according to the distribution of the population.

**Note:** During the last seven years, 54% of the rural migrants to the cities chose Cairo for their destination. This rendered the population density in Cairo to 130 thousand/km2, a congested average of 4/room. The per capita share of green area is 20 cm2.

As an effort to limit the factors of attraction in the existing areas, especially Cairo, it was decided according to the Law No. 59/1979 to give many facilities and subsidies to investors as well as the resettlers, in order to attract them to resettle in the new towns. These privileges should not be available in the existing cities. The privileges given to the new resettlers include: (7)

**<sup>6.</sup>** Ref.: The Central Agency for General Mobilization and statistics.

<sup>7.</sup> Ref: Low No:S9 for the year 1979, for the <u>Setting: of the New Urban Communities</u>, the General Organization for Government Printing Affairs, 1988, p:7 (In Arabic).

1. Exempting owners of housing units built in the new urban communities of the due taxes on real estate and from additional taxes and duties, under any designation or whatever the source which imposed them, for a period of 10 years starting from the date of completion of the building to be used. This has been done according to the duration defined by the authority board of directors, or included in the contract concluded with the concerned bodies.

- 2. Excluding "lands located within the boundary of the new urban communities, which will be reclaimed and cultivated at the time fixed by the board of directors, or included in the contract concluded with the concerned bodies, of due land tax, and additional taxes or duties whatever be their designation, or source imposing them for a period of 10 years of the date of reclaiming the land for cultivation.
- 3. Without prejudice to better tax exception determined in another law, or the tax exceptions determined under article(16) of the law regulating Arabic and foreign capital investment and the free zones, the profits of the companies and establishments which practice their activity in areas subject to the provisions of this law, are expected from the tax on commercial and industrial profits and supplements, for 10 years of the first financial year following the beginning of production, or of practicing the activity, as the case may be.
- 4. Exempting from the general tax on income, and for the same period of 10 Years.
- 5. Exempting the declaration procedures of property alienation in the real estate office from duties on alignment, authentication and fiscal charges.
- 6. The authority of the new urban Communities, individuals, firms and contracting parties are to be exempted from Custom duties, and other duties on imports necessary for projects related to establish new urban communities, in accordance with the Law no.62/1974.

7. To exempt from all taxes and duties the interests due on loans and credit facilities granted to the Authority to finance the projects in the New Urban Communities.

8. Applying the law regulating investment of Arabic and foreign capital, the free Zones and the law related to reconstruction and amendments. According to this the tax exemption is decided on the work carried out by the original contractors, subcontractors and consultants. Foreign staff are permitted to transfer in foreign currency, of no more than 50% of their salaries and bonus obtained in Egypt, to foreign countries.

In addition to the exemptions and facilities granted by the Authority of New Urban Communities, to investors and settlers, others are also granted in accordance with the Law No.59/1979. The Authority in order to encourage the settlement of citizens in the new towns, plotted appropriate areas for the projects and housing, and provided all utilities and public service buildings. The authority has also set many laws and regulations which facilitate obtaining a plot of land, or a housing unit in one of the new towns, concerning the price of land, method of payment, term of installments, the interest rate and everything which encourages the settlers to own a piece of land, and build on it. The Authority may also grant them a cooperative loan to build their houses, and exempt them from the tax on built units, and additional taxes and duties, for 10 years of the date of completion of the building and its suitability for utilization. Moreover, the authority has provided suitable and affordable housing units to the settlers of different housing grades (economic, low cost, medium quality, above medium). In addition, the Housing and Reconstruction Bank or the General Authority for Cooperative Building and

Housing grant L.E. 10,000 of the cost of the housing unit as a cooperative loan divided into installments over 30 years with a cooperative interest of 5%. (8)

Despite all these facilities and exemptions granted to settlers and investors, the new towns policy has only succeeded to a certain extent in attracting settlers for settling there, compared with what is planned and expected. This calls for reviewing and evaluating the National Urban Development Strategy and to what extent it has achieved its objectives, and reconsidering the difficulties which obstructed its implementation. Also this calls for increasing attraction factors in the new towns, and promoting repulsive factors from the existing cities, in addition to evaluate the system of managing new towns development, which has not achieved the basic objective of its existence, namely to attract the citizens and encourage their settlement. In addition, there is a need for evaluating and developing the organizational and administrative structure of the New Towns Development Authority, with respect to the changing conditions and factors facing the urban development of new towns.

**<sup>8.</sup>** Ref: Ministry of Reconstruction, New Communities, Housing and Utility: "New Towns - Shining Marks on the Mao of Egypt. December 1989 (In Arabic).

# 3.3 The Role of the Ministry of Reconstruction, New Communities, Housing and Utilities in Managing the Development of New Towns

After the 6th of October war 1973, there was a need to reconstruct the Suez Canal cities and to find a solution for the problems of housing and public utilities on the national level, especially that they had been neglected during the years of war. So, the government began to be greatly concerned about the programs of development. And in 1974 the political authority set up a working paper (October Paper) which pointed out the importance of comprehensive development programs and stressed the need for "setting and implementing a comprehensive urban strategy within the framework of a comprehensive plan for drawing a new map of Egypt. This does not come about by carrying out only scattered projects here and there, but by bringing about new populated centers with new economic activities. This would attract large groups of population and set up a settled, active and productive life, furnished with all facilities required, with a view of challenging the attractive forces of the capital. "With the same logic, and taking into account the conditions of each area, urbanization areas must be extended northwards along the Mediterranean coast, eastwards along the Red Sea coast and southwards around Nasser Lake". The October paper continues to determine the solution saying:" It has become necessary that Egypt should have its project for setting up new towns and building a number of new ports with their annexing towns along our extended coasts and such a new map of Egypt is not only a geographical or demographic map, but it will necessarily be economic in base, because the stable life cannot be extended except to the place where there are facilities for work and livelihood. Thus, setting up the new map has to be done with respect to socio-economic plans". (9)

**<sup>9.</sup>** Ref: Anwar EI-Sadat, October Paper: Building and Progress Phase, Information state organization, Cairo, April 1974, p: 47 (In Arabic).

Thus, the concept of urbanization and new communities came to light, and it has become necessary that there must be an authority which is responsible for it. So, the Ministry of Housing has been converted to the Ministry of Reconstruction, New Communities, Housing and Utilities. In 1978 the president's decree No. 275 was issued regarding the reorganization of the Ministry of Reconstruction and New Communities, in order to have within its responsibilities studying, proposing, drafting and carrying out the plans and policies of the urban planning and new communities, in such a manner as to be compatible with the targets of the socioeconomic development plans, within the framework of national policy, and to have in particular the following functions: (10)

- 1. Drafting the policy of urbanization, and working out development programs and plans, and coordinating them with the plans and programs of production and services.
- 2. Studying and drawing up the plans of urbanization regarding towns, villages, new communities and deserts in such a manner that guarantees utilization of the potentialities of both the geographical location and environment. This has to be achieved through coordination with other competent authorities.
- 3. Setting up comprehensive regional planning of the areas having socio economic priorities, and carrying out the projects falling under such planning.
- 4. Arranging and coordinating the activities of the public authorities and agencies working in the field of urbanization.
- 5. Executing urban plans, following them up and overcoming any financial or Technical difficulties obstructing their implementation. Also evaluating what has been achieved in such a manner that ensures realization of the stated goals.

**<sup>10.</sup>** Ref: <u>ARE Presidential Decree No. 247 for the year 1978</u> with regards to rearrangement of the Ministry of Development and New Communities. (In Arabic).

6. Working out plans for developing systems of construction, building materials and building technology, according to sound economic bases and in the light of requirements of urbanization and new communities.

- 7. Making the necessary studies for investing Arab or foreign capital falling under the responsibility of the Ministry in accordance with the rules stated by law.
- 8. Drawing up a policy for exchange of technical experts within the field of activities of the Ministry.
- 9. Concluding agreements and contracts with the various local and international agencies linked with the activities of the ministry.
- 10. Organizing training courses within the field of the interest of the Ministry, for the purpose of providing the technical staff on the different levels in such a manner as to increase productivity in such fields.
- 11. Participating in local and international conferences and seminars dealing with any field of interest of the ministry.
- 12. Proposing, studying and drafting rules and legislation falling within the field of interest of the ministry.

In 1979 the political authority concluded its efforts as well as its commitment to the policy of urbanization and new communities, as a cornerstone of its so do-economic development policy, by passing the law No. 59 for the year 1979, which set up the Authority of New Urban Communities in order to be the state authority for developing new urban community, as also for managing its utilities and projects. Thus the Authority becomes fully responsible for building and managing the new towns until they are transferred after being accomplished, to the local authorities. According to the law, the terms of reference of the Authority are as follows: (11)

**<sup>11.</sup>** Ref: <u>Law No. 59 for the year 1979</u> for the setting of the New Urban Communities, The General Organization for Government Printing Affairs, 1988, p:10, (In Arabic).

1. Proposing policies and working out plans and programs of urban development for setting up new towns, and gearing them to the plans and programs of production and services.

- 2. Making studies of the most suitable locations for the new towns.
- 3. Organizing and coordinating the exchange of views with the agencies, commissions and ministries working in the field of urbanization and its related fields. Also studying and executing regional utilities and services building for the projects of the new towns.
- 4. Following up the execution of the plans of developing new towns and overcoming what may obstruct execution of technical or financial difficulties, as well as evaluating the plan's achievements.
- 5. Working out the master plan and detailed plan for the selected sites, also, working a way at carrying out operations and projects through public invitation to foreign or local tenders or through direct contracting according to the rules and regulations of the organization, in addition to this, supervising the execution of such projects either by itself or through development authority in each new town.
- 6. Considering the best ways to carry out the regional utilities on the sites of the new town in such a manner as to insure the economic feasibility of the projects included in them, also undertaking land-plotting and implementing utilities, in the new town, whether by the organization itself or through the development authors.
- 7. Raising loans or getting funds according to the rules stated by the law, in addition to any other financial resources allocated for the Authority to ensure sufficient finance for the projects.
- 8. Helping in managing and supplying the equipment and materials necessary for Carrying out projects.

9. Promotion of selling, leasing or utilizing the lands of the new towns among Egyptian and foreign investors with the aim of realizing an economic development of the projects.

The organization may divide the new urban settlements into towns, villages and sections for which it lays down the conditions, the building specifications and types which are especially applicable to it, and which guarantee a certain color for the buildings, and according to which building permits are given.

The Authority of the New Urban Communities shall have its board of directors, as the highest power controlling its affairs. The board is to take up its responsibilities in the manner explained in this law, and it may pass the decisions necessary to fulfill the purpose for which the Organization was established. In particular, it should perform the following:

- 1. Setting the policy of raising the new towns, choosing their location, and approving their master and detailed plans.
- 2. Approving the proposed planning budget as well as the long term, medium term and short-term plans for the projects.
- 3. Determining the proper method for developing new towns
- 4. Drawing up the management policy of the new towns until their responsibilities are passed on to the units of local authorities.
- 5. Approving the administration structure of the Authority and taking the decisions concerning the formation of the new towns development authorities.
- 6. Examining the periodical reports which are filed according to the progress of work in the Authority and its financial status.
- 7. Approving the annual budget and the final statement of accounts of the Authority.

8. Considering what the higher authority of the Organization or its head wants to be submitted to the Board.

Accordingly and from studying the responsibilities of the Authority of the New Urban Communities, it was found that although the management of the new towns is subject to this Authority yet most of such new towns lie within the framework of the regional development of each governorate. This is because new towns developments are mainly treated within the national planning framework and not within regional framework. So, most of the new towns in Egypt were located as independent entities, and not in the framework of a regional plan for urban extensions into the desert land, taking into consideration that such new towns establish a base for new clusters of small housing settlements, organized in a hierarchical setting (Fig. (3.2).

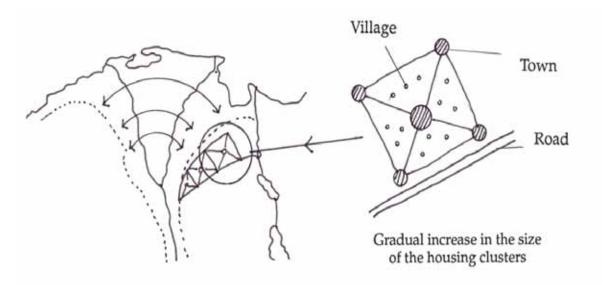


Fig. 3.2: An. Example of the hierarchical setting of new towns and new housing Settlements.

The planning method of the theory of new European towns, especially in England and France, has been applied to such Egyptian new towns in their detached and independent locations, despite the huge difference between both cases. The new towns in England or France were built around small existing

Settlements, in a regional framework with a variety of economic resources, manpower and services, which partly attached them to the existing system of local government. While new towns in Egypt were built in the middle of the desert, separated from the old urban areas by broad uninhabited desert, which kept them away from the influence of the local authority systems. This means that the management of new towns in England and France is to develop automatically and spontaneously into a system of local authority, as it actually happened. However in Egypt, the management and development of the new towns may continue for a long time as independent entities, without an urgent need emerging to attach them to the system of local authority, except with regard to supplying them with water, electricity and roads network. When urbanization extends, across the desert, from the existing governorates to the locations of the new towns, they may come within the urban framework of such governorates, and hence they become subject to the system of local authority.

It is clear that the influence of the local authority on the management of new towns development is marginal. Moreover there is a confusion in relating local services in those new towns such as education, health, security, housing ...etc to the central ministries or relating them to the nearer local authorities. The influence of the official authorities in managing the new town development is more obvious through the central than through the local authorities, especially with regard to the regional road and electric network. All these projects are included in the investment plans of the national socioeconomic programs prepared by the Ministry of Planning. This means that the influence of the Ministry of Planning on the management of the new towns development becomes indirect through the different ministries. So the socioeconomic development program lacks its spatial dimension, where the Ministry of Reconstruction is responsible for defining the location of the new towns, preparing their plans and management system according to the national planning policy.

## 3.4 The Role of the Regional Planning Agencies in Managing the New Towns Development

The Ministry of Planning divided the country into eight economic regions. It established a planning agency in each region. The Minister of Planning defines the organization structure of each agency and its relationship with the Governorates specially their departments of planning and follow-up in each governorate. (12) .The law No.43 of the year 1979 defines the system and the responsibilities of the regional planning agencies, which can be summed up in the following.

- 1. To carry out the necessary research and studies in order to determine potentialities as well as natural and human resources of the region, methods of their development, and their optimum use, beside suggesting the necessary projects for socio-economic development of the region.
- 2. To set the necessary technical departments in order to conduct the studies, the researches, and the planning operations on the regional level.

Furthermore, the law sets up a higher committee for regional planning in each economic region. The committee is composed under the chairmanship of the governor of the region's capital, and includes the following members:

- 1. Governors of the constituent governorates of the region.
- 2. Heads of the local people's councils of the constituent governorates.
- 3. Heads of the regional planning agency, as a secretary general for the committee
- 4. Representatives of the competent ministries who are appointed each according to a decision taken by the competent minister.

**<sup>12.</sup>** Ref: Dr. Ahmed Mohamed EI-Masry, <u>Local Administration</u>, University Youths Foundation for Printing and Publishing, 1989, p: 56(In Arabic).

This higher committee for regional planning has to do with the following:

1. To coordinate the plans of governorates, and to approve the priorities suggested by the regional planning agency, and which are taken as a base for laying down alternatives of the region plan, in the light of available resources, both locally and regionally.

2. To consider the periodical report for following up the plan implementation, to study the changes made to the plan by the regional planning agency- according to the conditions facing its implementationand to submit its recommendations to the Higher Board for Local Authority.

It is clear from the text of the third chapter of the law no.43 for the year 1979 that economic regions and regional planning agencies form a part of the local authority system, although the article No.9 of the same law shows that such agencies follow the Minister of Planning, and are formed according to his decision. (13)

This means a departure from the integrated concept of the administrative process in the localities, which turns planning into a double process between both the local and central authorities. It means, too, the absence of the spatial dimension in the processes of comprehensive development and planning, where attention is concentrated on the socioeconomic development, rather than urban development including development of the new towns, which comes within responsibilities of a sectorial ministry which is the Ministry of Reconstruction. This obstructs the influence of the Ministry of Planning and the regional planning agencies on the development of such new urban communities, in spite of the fact that they represent the spatial dimensions of the national plans.

**<sup>13.</sup>** Ref: <u>Law of the Local Administration System-No.43 for the year 1979</u>, and its Explanatory Note and Executive Regulation, General Organization for Government Printing Affairs, 1987, p:7 (In Arabic)

Such confusion between the responsibilities of the regional planning agency and those of the Authority of New Urban Communities is increased by the existence of the department of housing, utilities and urban planning as a part of the general department of sectorial planning which is related to the regional planning agencies. It is also increased by the existence of the departments of the regional planning studies, drafting and developing of the regional plan, follow up the implementation of the regional plan within the General Department for Drafting, Follow-up the Implementation of the National Plan, which is one of the main departments of the regional planning agency (Fig. 3.3).

- 1. The executive council follows up the jobs undertaken by the executive authorities (for each level), and evaluates the level of performance and good achievements of the projects and services (for each level).
- 2. The executive council assists the local public council in laying down the financial and administrative plans necessary for local affairs and implementing their decisions.

It becomes obvious that there is confusion in the organizational and administrative views of both regional and national planning concepts of the Ministry of Planning especially with respect to the spatial dimension which includes the new towns as well as the urban development regions determined by the Ministry of Reconstruction. This has subsequently affected the urban development of the new towns since they are constructed as independent projects having their own plans and management. Although they represent, in the context of regional planning, the most important elements of population attraction from overpopulated areas representing 4% of the area of Egypt inhabited by 96% of the population. This is the basis of the National Strategy for urban development, which is considered as the spatial dimension for the national strategy of socio-economic development programs, which achieves its main objective by reducing the

Population density in the overcrowded areas by providing repulsive factors in old urban areas together with factors of attraction in new towns.

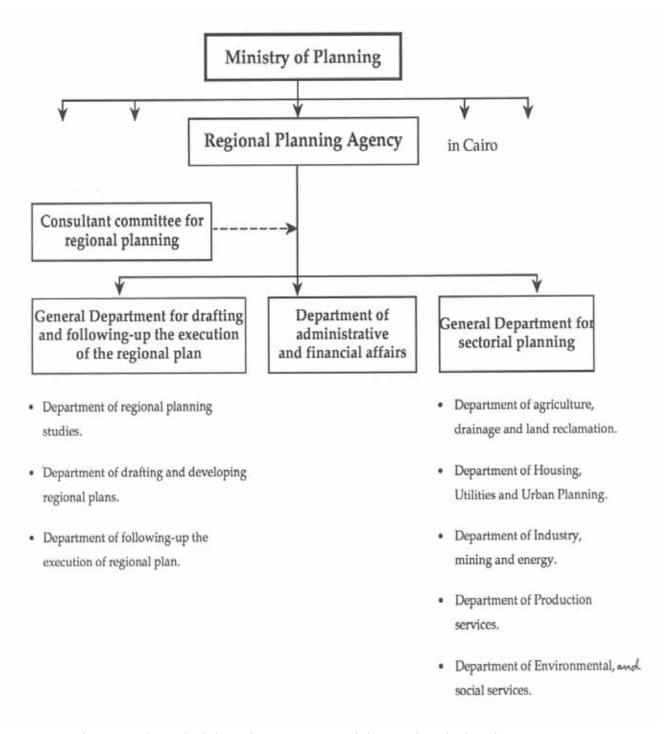


Fig. 3.3: The Administrative Structure of the Regional Planning Agency

Thus, the national and regional developments have to be associated with the organization and management process of relocating the population from old areas to the new towns. This stresses the role of organizational and administrative aspects on the urban development processes in which the new towns are considered part of it.

The economic feasibility for the socio-economic development projects have to be measured according to their achieving resettling in new areas more than financial profit. The resettling benefits, in the long run, will exceed financial profit in the short run. The management of new towns development becomes an integral part of the management of socio-economic development process, on both regional and national levels. Thus, it is not an independent process except in the executive framework of the projects, due to the fact that each project shall have its own management.

## 3.5 The Integration of the Socio-Economic Plans with the Urban Development

Urban development in Egypt, in both the old and the new areas, suffers from non-integration of the socio-economic plans with urban development, in view of the fact that socio-economic plans are worked out within the framework of the Ministry of Planning. This Ministry is responsible of preparing the different development plans, after defining the different financial resources, studying the available financing potentialities, working out the planning alternatives. The Ministry then distributes the investments among the different sectors and coordinates the socio-economic plan projects on the level of each sector. The Ministry is also responsible for following-up the execution of the plan and the evaluation of performance.

The National Planning Institute assists the Ministry of Planning by conducting the researches and studies necessary for solving the of problems socioeconomic development, developing planning methods adapted to the local conditions, training the employees working in the planning agencies and increasing the planning awareness of the community. This makes the institute a center for scientific research directed toward socio-economic development. (14)

Moreover, the Central Authority for Mobilization and Statistics assists the Ministry of Planning in performing its function of providing the data and statistics relevant to different institutions in Egypt, whether they are ministries, public sectors units, local authority units, or other official agencies. The Central Authority for Mobilization and Statistics lays down particular rules for data gathering and circulation and prohibits some of those related to national interests and security.

**<sup>14.</sup>** Ref: Aly Aly Farag, The Planning Agencies..Did they fulfill their function? AI-Ahram AI-iqtisady, issue No.631, 26/2/1981, p: 16 (In Arabic)

Thus, the activities of the central authorities for socio-economic planning are oriented toward the economic aspect in the absence of the spatial dimension in spite of the fact that the plans of socio-economic development programs are transferred into urban projects which are carried out in various towns and regions. Consequently, the spatial dimension, in that manner, has got a direct effect on the urban development which is undertaken by other agencies that plan and implement the projects.

As to urban development, it is undertaken by the Ministry of Reconstruction, New Urban Communities, Housing and Utilities through its agencies, such as the General Organization for physical Planning which is responsible for setting the regional plans for urban regions and the urban plans for towns and villages through local agencies in the governorates, as provided by the law of urban planning no:3 for the year 1983, which was passed three years after the law No.43 for the year 1979 concerning subdivision of the state into planning regions. (15) The authority of New Urban Communities is responsible for making the master plans of new towns within the framework of the National Development Strategy, and supervising the execution of development by supplying facilities, public utilities, housing, or industrial development, through the cooperation with the appropriate agencies in the country. Moreover, it supervises the new towns development authorities" but it has no authority of controlling urban expansions on the desert lands adjacent to the existent towns. So, it deals with separate and independent new urban communities rather than the new urban expansions across the deserts, which are considered new communities in the scientific sense, while such urban expansions fall under the responsibilities of the General Organization of Urban Planning.

**<sup>15.</sup>** Ref: Law No.3 for the year 1982, <u>Enacting the Law of Urban Planning</u>, General Organization for Governmental Printing Affairs, Cairo, 1985. (In Arabic)

On the other hand, the Agency of Research and Studies, in the Ministry of Reconstruction, New communities, Housing and Utilities enforces the decisions and recommendations of the Consultative Committee for Development- which the Ministry has formed- in such a manner as to realize the National Development Strategy. The Agency of Research and Studies aims at making studies of the urban projects with all its socio-economic and physical aspects, carrying out studies of comprehensive development and urbanization, and the feasibility studies of the projects and its designs and specification. In order to carry out such objectives into effect, the agency undertakes the following tasks: (16)

- 1. Conducting technical researches and studies for planning new towns and the development of urban projects in coordination with the appropriate authorities.
- 2. Conducting researches and studies in the field of comprehensive development and urbanization, as well as the feasibility studies of the projects and drawing up its technical specifications and design.
- 3. Suggesting the ways and means of financing the development studies, and drawing up the policy of spending on them, according to priorities and within the framework of comprehensive planning for development.
- 4. Conducting competitions among the consulting firms and comparing them in order to determine the best of the projects according to its economic and technical aspects. Managing the procedures of assigning the planning studies to the consulting firm, preparing the term of Reference (T.O.R.) and insuring its implementation through an efficient system of management and follow up.

**<sup>16.</sup>** Ministry of Reconstruction, New Urban Communities, Housing and Utilities, Reconstruction in Egypt, December 1989, p. 288 (In Arabic).

5. Setting-up a Center of Information and Documents and working out the network of data, with a view of recording all general and detailed plans.

On the other hand, the General Organization for Housing, Building and Urban Planning Researches undertakes the responsibility of researching in the field of developing housing, building and urban planning studies whether through academic or applied researches. It also provides professional advice and distinguished technical services- in both of the lab and the field, and participates in scientific and technological cooperation with the Arab and world scientific foundations. The Organization consists of eight scientific researching departments, among which are the departments of architecture and housing researches and the department of urban planning researches. Both departments are concerned with the specific and scientific researches which serve the urban development processes especially in the field of developing housing projects and public utilities, as well as the field of following-up and evaluating the current experiments with regards to housing and urban planning projects, whether in old urban areas or in new towns. Therefore, the urban development activity becomes detached from that of the socio- economic development, although urban development is considered a part or an essential product of the socio- economic development.

As the executive and local public councils play their role in socio- economic development on the local level, they play, also their role in urban development through the terms of reference set for them. The role and responsibility of the local public councils concerning urban development is: (17)

1. Approving the projects of the socio-economic development plan, the annual budget of the governorate and following up its implementation.

**<sup>17.</sup>** Ref: Ahmad Mohamed AI-Masry, <u>Local Administration</u>, University Youths Foundation for Printing and Publishing, 1989, p: 68 (In Arabic).

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2. Defining and approving the community participation plans in implementing local projects whether through self-help modes or through their financial contribution.

- 3. Approving public projects which satisfy the requirements of housing and construction, and proposing urban planning projects.
- 4. Approving the implementation of public utilities projects, as well as local productive projects.
- 5. Suggesting tax levy of local nature.

On the other hand, the role and responsibility of the executive local councils in connection with urban development is specified according to the law No.43 for the year 1979 with its amendment of the law no:50 for the year 1981 and the law no:168 for the year 1981, as follows:

- 1. To follow up the jobs undertaken by the governorate executive agencies, and to improve the level of performance of projects and services on the level of the governorate.
- 2. To work out the budget plan of the governorate, and to suggest the distribution of funds allocated for investment (after being approved) among the local units.
- 3. To lay down the general rules for the management, investment and disposal of the lands and properties of the governorate.
- 4. To lay down the rules and regulations of housing and urban planning projects in the governorate.

The relation between the central governmental agencies and the local authorities is clear in the diagram. (18) - (Fig. 3.4).

**<sup>18.</sup>** Ref. Dr. Farouk Youssef, <u>Local Administration and its Relation to Central Government.</u> The Central Authority for Administration and Organization. Administrative Leader Programs, 1989, p: 10 (In Arabic).

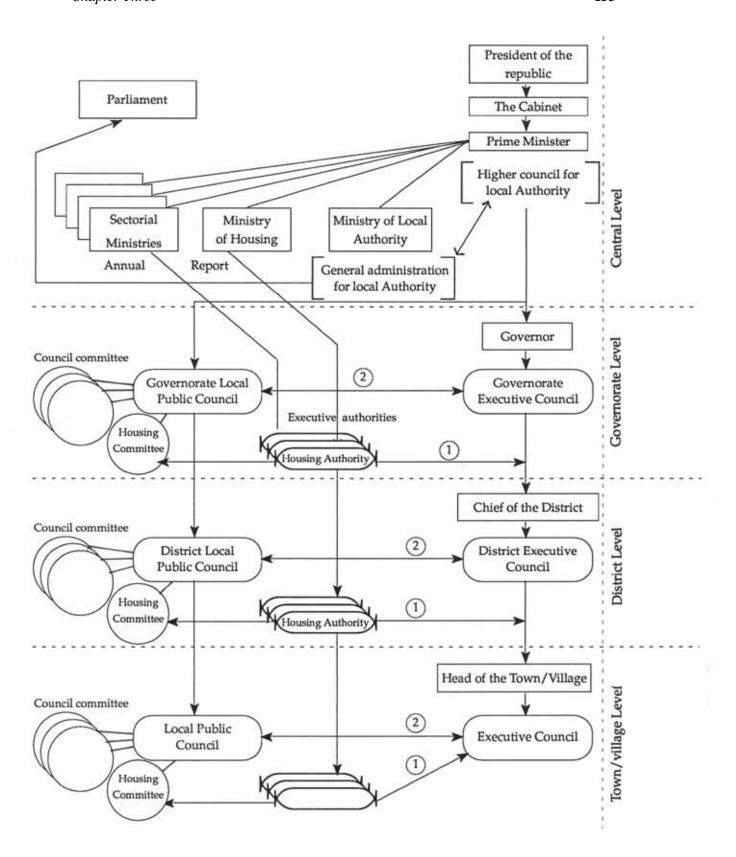


Fig. 3.4: The relation between the central governmental agencies and the local authorities

The organizational structure of the state development agencies shows clearly the absence of new development areas including the new urban communities and towns. This is in spite of the fact that the National Strategy for urban and socio-economic development aims to increase the factors of attraction in the new development areas together with increasing the repulsion factors in the existing urban areas. The urban development of new settlements requires establishing of authorities to receive and resettle new families in the new urban areas in co-ordination and cooperation with authorities for immigrating the excess population from existing urban areas. Accordingly, this will affect the distribution of investments among different development projects so as to achieve such target. And this is what should be undertaken by the executive and public local authorities, which must be considered as a strategic target, and its role must not be limited only to the development of the actually existent areas.

## 3.6 The Organization and Administrative Structure of the Authority of New Urban Communities

The Central Agency for Organization and Administration issued its resolution no. 36 for 1982 for the organizational structure of the "Authority of the New Urban Communities". In the same way resolution no. 318 for 1982 was issued for the approval of the functional classification and the job description of the said authority.

The organizational structure of the authority is divided into four major classifications. (19) - (Fig. 3.5).

**First:** Department's subsidiary to the chairman. They include the general department of planning and follow-up and that of information and documentation centre, and technical secretary, organization and administration, public information and public relations, civilian services, security and department of legal affairs.

Second: Vice chairman and president of technical affairs sector. It includes the central department of projects studies and researches comprising the general department of survey, reconstruction and the feasibility studies. It includes also the central departments of project planning and preparation comprising the general department of project planning, census, design and planning. The last is the central departments for tenders and contracts including a general department for tenders and contracts.

**Third:** Vice chairman of the Authority and President of Co-ordination and follow-up sector.

**<sup>19.</sup>** Resolution of H.E. the minister, chairman of the Authority of the new urban communities No.36 for 1982 approving the organizational structure of the Authority and Affiliated agencies, Prime Ministry. (In Arabic).

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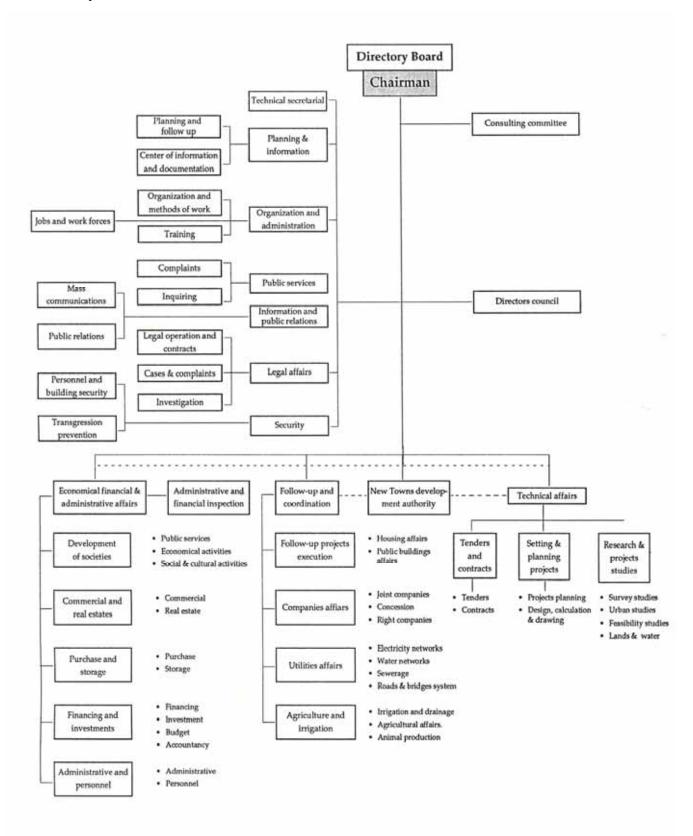


Fig. 3.5: The administrative structure of the Authority of New Urban Communities

The authority includes the central department of projects follow-up, comprising the general department of housing and public buildings. It includes also, the central department for companies comprising the general department for joint companies and concession rights companies. Besides, there is the central department of utilities affairs supervising the general department of electricity network, water supply, sanitary drainage, roads, and bridges. Last of all, the said sector comprises, also, the central department for agriculture, irrigation comprising the general department of irrigation affairs, drainage, agriculture and animal production.

Fourth:

Vice chairman and President of the Financial, Economic and Administrative Affairs sector.

It includes the central department for finance and investment that comprises the general department of finance, investment, budget and accounts and the central department of procurements and storage which involves the general departments of procurements and storage. The same sector includes also, the central department of commercial and real estate affairs, comprising the two departments of commercial and real estate affairs, and the central department of management and personnel affairs, which comprises the general departments of administrative affairs and personnel affairs. Then comes the central department of the development of new communities which includes general administration of public services, promotion of economic activities, cultural and social development. Last of all is the central department for administrative and financial inspection.

The memorandum of the organizational structure and terms of reference of the previous classification defines the bases on which these classifications are based.

It is mainly clustering similar activities in one organizational division to Realize homogeneity in classifications of activities of the same nature. Concern is paid to devote a special organizational division for public services which directly follows the chairman of the Authority. Another division is also devoted to "planning and information" to have an integrated system of information, feeding operations of planning, follow-up, performance evaluation, consolidating results of studies and researches. There is a special division for the "economical feasibility study" that undertakes analytic studies for the new projects. There is a division specially for "water and land" researches serving agrarian projects assisted by another division for "agriculture and irrigation". The memorandum states that organization and administration have been established to facilitate work in order to run smoothly between the chairman office and the new urban communities to ensure good supervision on specialized work. Another responsibility is to define the organizational relationship necessary to finalize daily work jointly between the agencies of the new urban communities and the office of vicechairmen of the Authority. Hence, this will lead to horizontal contact between presidents of the new urban communities and the vice-chairmen of the Public Authority, and also, between the officials responsible for specialized work in the new urban communities and their officers counterpart in the Public Authority.

This means that the administrative and organizational structure of the Authority is built on the conventional basis as in the executive bodies of the state which include:

- 1. Technical affairs.
- 2. Follow-up and co-ordination.
- 3. Administrative financial and economic affairs.

The memorandum does not include the technique on which the organizational structure can be built. This may be due to the necessity of complying with the conventional techniques of preparing the organizational structure prescribed by the Central Agency for Organization and Administration as a basis For the legality of executive operation in the state administration. Similarly, the organizational structure does not clarify the technique, of the procedures of the different activities included in the urban development process integrating physical, social and economic aspects. The organizational structure considers the Authority as an executive rather than a development body. There is a great difference between the two forms. The first one considers the Authority as a body which undertakes the execution of a number of limited projects in a defined framework of urban planning to be executed in defined. stages according to the supplying of investments for each project. Hence, the goal of the division of "public services" is not shown as "resettlers services". There is a great difference between the two goals especially when we consider the main goal of setting up the new urban communities is to absorb the population surplus from over-populated urbaned or agricultural areas in new areas, and providing them with job opportunities, dwellings and services in an integrated way. This had not actually taken place after a long time as a high ratio of industries has been built while a small ratio of population and services has been housed.

As for the division of "planning and information" it has been proved that the planning of the new town has been prepared in advance on basis of planning information and desired outlooks which are realized according to designated programmers. This means that the organizational structure of the Authority considers planning a static stationary operation, except in the executive stage, and not a dynamic operation subject to economic and social variable and also, to the changes in population attraction so that the prime goal of setting up the new urban communities can be realized. The dimensions of the division of the "economic feasibility study" have not yet become clear as the Authority does not undertake investment projects.

Its projects are dominated by the services, the housing and the Infrastructure aspects leaving the investment projects to investors specially in the industrial fields. (20)

On the other hand, the division of the "researches of land and water" is closely connected with the division of "agriculture and irrigation" which aims at supervising the reclamation and cultivation of land and animal production. While these activities are assigned to other ministries and public and private institutions. Thus, the organizational structure of the Authority has not clarified whether it has to supervise the execution of public buildings, infrastructure networks and several housing projects, or whether it has to undertake investment projects.

It has been found that the central department of the "affairs of the new communities development", which includes, the general department of the "affairs of public services", "the development of economic activities" and the "cultural and social development", only has a directive role. The concerned ministries undertake these activities, including industry, public health, education, social affairs and culture. The Authority of the new urban communities has no investment capacities. It cannot operate the educational and hygienic services which yield to disciplines and rules of the concerned ministries. It is obvious that there is a contradiction in the organizational structure of the Authority of the new urban communities whether it is considered as an executive body or as a body which has the power to put policies and programs to be implemented within an independent management system complying with management by objectives. In this case, it can undertake the operations required for of urban, social and economic development as an investment project which can realize the goals of attracting resettlers to the new communities.

**<sup>20.</sup>** An Interview with the staff of the Authority of New Urban Communities, 1991.

Although the organizational structure of the Authority of new urban communities followed the organizational structure of the authority of new towns in Britain, it did not follow its operational system especially in the application of techniques of performance, working manuals and personal upgrading. The British experience witnessed evident evolution in performance and assignments in the light of the continuous follow-up and evaluation processes.

The organizational structure of the Authority of the new urban communities consists of three main sectors. Each comprises a number of central departments. Each central department is divided into a number of general departments. This may be due to the policy of providing jobs for high cadres more than being an administrative necessity coping with volumes of work. It has been proved in the review of work of these departments that a number of them do not exist and a number of them has no work. However, the organizational structure of the Authority has not realized the goals which aim to increase the rate of resettling the new inhabitants in the new towns because of the financial and administrative constraints in which this Authority operates. The Authority is also limited with the available budget of the successive five year plan. This budget is obtained, after approval from the Ministry of Planning, the National Investment Bank and the Ministry of Finance. This obstructs the process of urban development and slows down its performance rates. It is difficult for the Authority to become financially or administratively independent from other government agencies. This is different from the case of the development authorities of new towns in Britain which have financial and administrative independence and operate in order to realize certain goals to develop the areas under their concession.

The organizational structure of the Authority of new urban communities have been put in a form characterized by ambition and idealism with no coordination with the administrative and organizational systems of other agencies which directly or indirectly deal with the development of new towns, specially with

Authorities that are associated with the realization of the goals of the socioeconomic development put by Ministry of Planning. Although the Authority
of the New Urban Communities administratively follows the council of
Ministers in compliance with the presidential decree No.351 in 1980 yet it
actually works in the administrative framework of the Ministry of
Reconstruction, New Communities, Housing and Utilities. The development
policy therefore varies according to the dependency of the authority on a
central planning authority, presented by the Ministry of Planning and the
central executive authority presented by the Ministry of Reconstruction. View
points, also, vary as to whether to consider the Authority with central planning
and executive power or with planning at the central level and executive power
at the local level. This depends on the political and economic system of the
state.

The law that established the Authority of the new urban communities was issued in 1979 (under No.59). The economic and political concept of the state has witnessed since then, remarkable changes over the last twelve years. But the organizational and administrative structure of the Authority issued in 1982, has not witnessed any basic change as well especially in affairs related to the economic system.

The economic system of the state has changed from being only depending on the public sector to the encouragement of the private sector to play its role. This is known as privatization. Accordingly, the Authority of the new urban communities can be developed to cope with the new approach of the State and acts as an agency with central planning powers. Meanwhile the development authorities of the new towns can act as stock companies with freedom of action and taking decisions in order to achieve the objectives predefined by the central authorities. This change will be reflected on the organization and management system of the Authority as well as the new towns development authorities. One of the assignments of the Authority of the new urban communities is to set up the general and detailed

Planning of sites selected for setting up the new towns, in spite of the existence of another authority for such a work, i.e., the General Organization of Physical Planning which has supervised the setting up of plans of ten new settlements around Cairo. Moreover, the Authority did not prepare the plans of the new towns as assigned in the organizational structure. The plans were actually prepared by private consultants because of the inefficiency of the technical potentials of the Authority. It is also within the assignments of the Authority, through its central department of the "Projects studies and Researches" to prepare the urban studies and to define their term of reference upon which the general and the detailed plans are prepared. But, the "agency of research and studies" in the Ministry of Reconstruction undertakes this role instead of the New Towns Authority. This leads to the duplication of assignments and the loss of both effort and time. On the other hand, one of the assignments of the New Towns Authority is to divide the new urban community into towns, villages, areas and districts, and for each it puts the related building regulations, conditions, specifications and models for building. This will give each area a certain color, height and architecture character. In this case, the assignment of the Authority includes what may be an approach to regional planning. But this has not been realized.

The board of directors of the Authority which includes a number of ministers holds a good load of executive powers such as issuing the resolutions to omit, or to practice assignments entitled to the board of directors of the Public Agency for Investment and the free zones. The board also defines the land for reclamation and cultivation within the boundaries of the new urban communities. In addition to the previously mentioned responsibilities are those of enforcing rules to approve land subdivision in the desert or reclaimed and cultivated areas outside the boundaries of the existing cities. These responsibilities increase the load on the board of directors which rarely meets to review reports on the follow up of the execution of the new towns. Consequently the adoption of resolutions was Obstructed.

This had a passive effect on the rates of development of the new towns. However, it is one of the assignments of the Chairman of the board of directors to inform the Prime Minister with the resolutions adopted by the board for approval which may promote work for the new towns development.

It has been found that the advisory committee which assists the chairman of the Authority is assigned with a number of activities, one of which is the selection of models and structure of the new towns administration system, yet its role in this respect has not much changed from the structure approved by the Central Agency for Organization and Administration. This structure has not been reviewed, evaluated or even developed for twelve years since the organizational structure of the Authority was put. Moreover, the role of the Council of Directors in the Authority structure has not shown a clear policy with regards to means and ways of developing the administrative procedures in the new towns Development Authorities. No steps were taken for raising the rate of performance and increasing productive efficiency of its employees. The follow-up of the performance in the different divisions and departments of the new towns development Authorities shows that they include an increasing number of early-pension officials from the armed forces who hold key position in these departments without identifying the nature of work or having prior experience in administering new towns development. This situation reduced the rate of performance and productivity especially in the absence of models and manuals of operation that illustrate and clarify ways and procedures of performance. The technical and administrative operation did not regularly proceed adequately specially in case of continuous replacing seniors or personnel. (21)

There are some divisions in the organization structure of the Authority which reports directly to the chairman of the Authority. Beside the technical

**<sup>21.</sup>** Ibid.

Secretariat, which mainly undertakes the secretarial work, there is the department of "planning and information". Its assignment is actually to undertake the follow-up of the execution of projects rather than to set up plans by collecting the proposed projects from the different departments and present them to the Chairman with reports on the follow-up of the projects under execution. It was found that the centre of "Information and Documentation" within the Chairman's office has not realized most of the assignments designated to it. In the same way, the department of "Organization and administration" has not succeeded in putting the rates of performance especially for the engineers, or in preparing a system for position evaluation. It did not organize training programs in administrative and technical fields, especially for the personnel who change their jobs and positions. Moreover, the role of the department of "Information and Public Relation" is limited to receiving visitors and developers. Similar agencies within the authorities of new towns, in Britain or France for example, are of great importance for the development process. These agencies work for promoting and marketing projects and attracting new settlers and investors. This can be achieved either by showing films or distributing informational brochures on opportunities or prospects of investment available in new towns and clarifying procedural steps that facilitate work for the investors. The "information and public relation" department has to be on the top of the organization structure because of its important role in the development of the new communities. This phenomenon is missing in other departments of the Authority of urban communities. For example, the role of the department of "public services" has only been limited to the information of the Ministry of Reconstruction without defining its role in the Authority of the new urban communities. This department has to be in the organizational structure of the new towns Development Authority as part of the department of "information and public relation", which has to adopt all means to attract settlers and investors to the new towns.

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The general evaluation of the organizational and administrative

structure of the Authority and its assignments reveals the great difference

between what has been decided upon and what has been actually executed.

The expected manpower existing in the Authority represents 12% of all the

total manpower expected in the administrative structure. There is an evidence

of contradicting assignments between the different departments. There are, for

instance, some departments which are not functioning and their assignments

are transferred to other departments. Moreover, the number of temporary

manpower is much more than that of the permanent manpower. It can be

concluded that the work of the Authority with its various agencies is only

limited to the execution of the general plans of the new towns, in the following

major fields.

1. Roads and Public Utilities

Work is limited to the setting up of the infrastructure projects in the light

of defined stages and available investments.

2. Housing

It is limited to building public housing in some zones to be let or to be

owned, planning and land subdivision in other areas and selling them to

the private sector that will build them according to definite building

regulations.

3. Industry

It is devoted only to provide the infrastructure in the industrial areas that

have to be classified among industries according to their types and

volume. The industrial areas have to be sold to investors according to

certain rules and incentives.

#### 4. Public Services

It is confined to constructing public services buildings such as schools, markets, administrative, health and recreational centers in the light of the needs of the different residential areas.

The execution of these activities should be followed-up in the light of general and detailed plans provided by the consultants and according to its related procedures such as legal and financial matters. This means that the management concept in this case is the management of pre-defined projects rather than the management of development, promotion and marketing, whereas, the concept of management of development aims mainly to increase the resettlement rate in new towns. This has not yet been realized as desired according to the time schedule program for the construction and development of these new towns.

The concept of management adopted by the Authority, in this way, differs greatly from that adopted by the property stock companies which undertake the development of the new urban communities. A good example for this is the organization and management of Ein-Shams Oases Company for the construction of Heliopolis, which began in 1909.

### 3.7 The Organization and Administrative Structure of the New Towns Development Authority

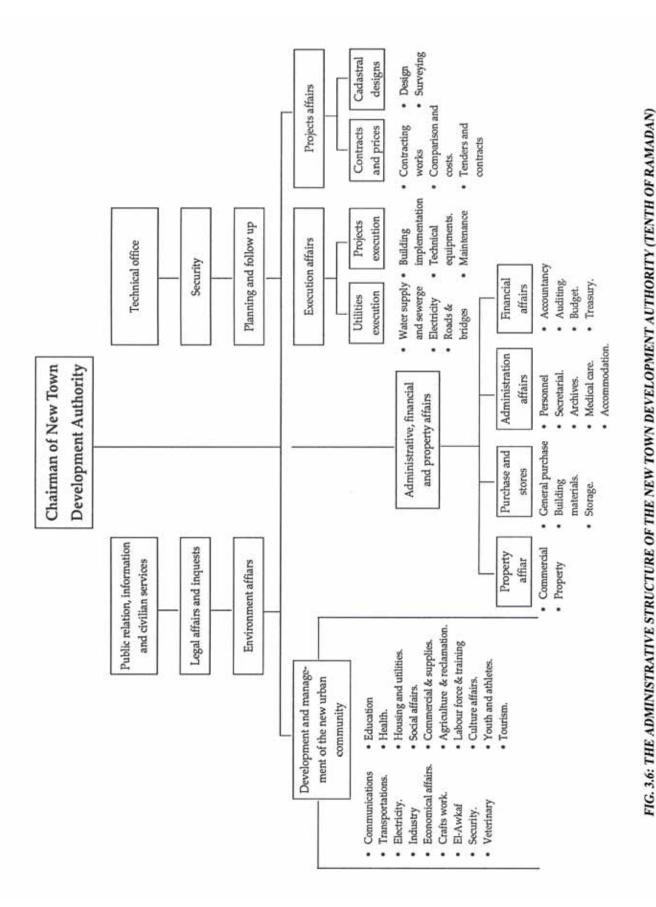
The Chairman of the Authority of the New Urban Community issued the resolution no. 36 for 1982 on the composition of the organizational structure of the new town development Authority (NTDA) in both the 10th of Ramadan (Asher Min Ramadan) and Sadat (Fig. 3.6) as a model for the management of other new towns. The structure of the administrative organization of the NTDA is composed of the headquarters assigned to supervise all the activities of the NTDA and evaluating its operation, reinforcing its units, enhancing co-ordination of work, implementation of the plans and programs approved for the NTDA from competent authorities. It is, also, assigned to represent the NTDA in front of the others, signing contracts of loans required for financing the new towns projects and finalizing related procedures and contributing to draw the general policies of the NTDA and preparing draft budget of the NTDA, and presenting the final balance budget to concerned authorities. (22)

It is noticed, from the study the role and assignments of the chairman of the NTDA, the following: (23)

1. The chairman of the NTDA has not got the total freedom of movement and adoption of rapid decision that may be required to face the changing factors affecting the development of the new towns. He has to report to the Authority of the new urban communities. This results in delaying the development process of the new town.

**<sup>22.</sup>** Resolution of H.E. the minister, chairman of the Authority of the new urban communities No.36 for 1982 approving the organizational structure of the Authority & Affiliated agencies, Prime Ministry (In Arabic).

<sup>23.</sup> Prof. Mohamed Hosney Amin - <u>Management and Development of New Communities in Egypt, Findings of the Seminar in "Economic and Social Development of New Cities", Cairo,7-10j4j1986. The National Centre for Social & Criminal Research- Ministry of Reconstruction, Authority of new Urban Communities (In Arabic).</u>



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2. The responsibilities of the chairman of the NTDA requires from him to stay permanently in the new town. This contradicts with what is actually taking place as he normally spends three days in the new town and the rest of the week in his office in the Ministry of Reconstruction in Cairo.

- 3. The chairman of the NTDA has many responsibilities as he has to take all the decisions concerning the new town. This centralization of the decision-taking is considered a burden on him and that may obstruct the development process of the new town.
- 4. The role of the chairman of the NTDA is mostly an administrative and organizational role. His responsibilities do not extend to include the authority of setting or modifying the policies concerning the urban, social and economic development of the new town.
- 5. One of the assignments of the chairman of the NTDA is to study the reasons of the staff non-commitment to the administrative regulations. However, there is no assignment for him to evaluate and modify the different projects in the new town. Moreover, he has no actual authority to follow-up the execution of the projects and to investigate how far they have achieved their objectives with respect to the given time schedule and aiming to achieve well-balanced social, industrial and services development.

In the organizational structure of the new town there is a "Technical Office" which is affiliated to the chairman of the NTDA. The technical office is assigned to prepare studies and subjects to be presented to him. This office, also, receives remarks and comments from control authorities in the State and it reports to them, in addition to its work as an executive secretariat. Affiliated to the chairman of the NTDA is the department of "Public relations, information and civilian services". First and foremost if its assignments is to increase the public awareness among staff of the NTDA and to approach public information media to provide it with the required data and information. Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved.

It, also, receives visitors and foreigners and investigates public opinion and view- points of staff of NTDA as well as the views of the people who are dealing with it, etc... However, in practice these assignments are limited to achieve some simple tasks which led to locate this department in a separate room outside the building of the NTDA (in Tenth of Ramadan) and some junior officials are appointed to do such tasks, when required. Hence, this department does not actually invest the various means and media of public information to attract more inhabitants and investors. It does not prepare the commercial, athletic or recreational activities that assist in attracting such people. The assignment of the said department is only limited to recreational activities for the staff of the NTDA. Similar departments are of a great importance in new towns in England or France as they promote and propagate the marketing of the various projects. Professional and specialized personnel are appointed in these similar departments because this type of activity requires dynamic, diplomatic and presentable staff. (24)

Affiliated to the chairman of the NTDA is a third department, Le. "Legal Affairs and Inquests" which has various assignments related to legal proceeding, writing, contracts and agreements and investigation of complaints. The fourth one is the "Security Department" which has several assignments for preventing financial and administrative corruption. It will inform against any gathering, demonstration, or meetings to be held against the law. This will make the department exaggerate these assignments to a degree exceeding what can be associated with the nature of the work or giving too much concern in fear of corruption and demonstration.

A fifth department for "Planning and Follow-up" follows the chairman of the NTDA. Its assignments are to provide links between the socio-economic plans of the Authority of new urban communities and the planning and development of the New towns.

**<sup>24.</sup>** An Interview with the staff of the tenth of Ramadan Development Authority, 1991.

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However, as mentioned before, it is among the assignments of the chairman of the NTDA to execute the programs and plans given to the NTDA by concerned authorities. This means that this department is given more assignments than its responsibilities and its potentials. Also, its assignments are to, conduct planning studies required to establish or expand the development of the new town. But, this has not actually taken place. The activity of this department is already limited to introduce little changes and to follow-up construction of projects. The sixth department is the "Office of Environmental Affairs". Its assignment is to preserve and protect environment from pollution, deterioration and maintenance of healthy life. But actually nothing of that happens.

The organizational structure of the new town development authority includes four central departments with a number of public departments affiliated to each. For instance, the central department of "Projects Affairs" is assigned to prepare the studies required for engineering projects and architecture designs. The department also reviews and checks designs and drawings and follows up the implementation of the projects. It also prepares survey drawings and maps, statistics data and reports. It, also, participates in proposing plans and policies for the development of the new town. Moreover, it appoints the contractors of the projects, after preparing the contracts and accepting the costs. The department prepares the specifications and quantities. The details of these assignments are not appropriate to the modern and recent concepts of project management. There is a need for setting well defined execution programs for each stage of each project according to the available budgets. There is also a need to co-ordinate the execution programs of each project in the different sites with the different phases of the new town social and economic development.

The organizational structure of the NTDA includes, moreover, the central department of "Execution Affairs" which is assigned to supervise the execution of the projects and to prepare progress reports about the results of performance. A Section of this department is assigned to propose the requirements of the NTDA from technical equipment, vehicles and spare parts.

This type of activity does not belong to the execution of projects carried out by contractors. This section supervises, also, the operation of equipment, vehicles, their maintenance and issuing their licenses and supplying oil and fuel for them. It, also, contributes in drawing the policy of transportation as well as other assignments that show the enormity of this section which is actually unrealistic. This central department includes, also, a department for "Utilities Affairs" with the assignment to supervise the execution of all work related to sanitary drainage, drilling of wells, water supply and electricity network, roads and bridges. This is the most important department entrusted with the execution of public utilities but it has not taken its proper position in the organizational structure of the NTDA This reveals the inexperience of the designator of these assignments, concerning the nature of work in constructing the new towns projects.

The NTDA, furthermore, includes in its organizational structure the central department of "Administrative, Financial and Property Affairs". It consists of the public department of "Financial Affairs" including accounts, checking, budget, balance sheet and treasury. It also includes the public department of "Administrative Affairs" including personnel affairs and procedures, the secretariat general, archives, medical and social care for employees at the NTDA, and their needed services and accommodation. It also includes the public department of "Purchases and Stores" including purchases of building material, department of "General Purchases" and the department of "Stores". It also includes the public department of "Property Affairs" followed by the "Commercial Affairs' Department" which proposes policies and rules of benefiting from land and buildings, participation in preparing terms and conditions of land owning, sale and rent. It is also followed by the "Property Department" which receives the forms forwarded by the clients and records and sorts them. It also keeps follow-up records and forms to define the clients' positions and situations.

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The Assignments of the public department of "Property Affairs" are stated briefly and without mentioning the administrative procedures of the different types of transaction between the settlers and the different departments of the NTDA. This shows the absence of know-how of the different administrative procedures in the new town development. (25)

The new town development authority includes, besides, the central department of "Development and Management of the New Urban Community". This is a comprehensive concept that includes most of the assignments in the other departments. However, the assignments of this sector have been limited to practicing the assignments allotted to administrations of public services and to the local government units concerning the affairs of agricultural and industrial production and transport, communication and to reinforce social life through syndicates, unions and clubs. In the same way, cultural and artistic life can be enhanced, and competitions and artistic exhibitions can be organized. The assignments of that sector have to facilitate the requirements of life in the society and to assist the settlers in getting the licenses and permits need for practicing social and economic activities. It has to provide facilities to ministries and central agencies of the state to run their activities in the new town. This central department includes the assignments of nineteen types of activities representing all activities of the state: education, housing, utilities, supply, labor force, youth, athletes, transportation, electricity, economic affairs, agriculture land reclamation, cultural and tourism, communication, industry, El- Wakf, security and veterinary affairs. Hence, it is evident that there is an exaggeration in defining the assignments of this sector and it is overburdened especially when it is known that these assignments include all the details related to each activity such as establishing and managing school libraries, sports clubs, setting up and fitting medical units of different types of clinics and hospitals and so on as to the various nineteen activities.

**25.** Ibid.

This may clarify the enormous load of assignments that need a good number of specialists in all these activities that represent the executive sectors of the state.

It becomes evident that the preparation of the administrative structure of the NTDA was not set up on realistic prospective or actual view of the processes that constitute the urban development. This can be seen from the definition of the assignments of the different departments and sectors in a way lacking true understanding of the nature of the work and the relative importance of each department. This asserts that the development of the organizational and administrative structure of the NTDA is not limited merely to the procedural aspects. It should include the general concept of the mode and technique of the management of urban development with all its planning, executive, resettling and investment aspects that aim at attracting inhabitants from overpopulated areas, existing in agricultural regions, to the new town. This means that the administrative and organizational structure of the NTDA should follow the style and technique of the development policy with its various activities and procedural steps so that every activity can be defined and its requirements be decided. There should be functional coordination between these activities which will enhance their performance in the framework of the comprehensive and integrated process of urban development. Consequently, the suitable administrative and organizational structure that copes with them all should be designated. This means that the administrative structure should follow the structure of the developing process which is put by specialists in urban development and by those who know well all the elements of this process. Then, specialists in administration and organization can designate the administrative and organizational structure in its technical term and form coping with the rules and principles put by the Central Agency of Organization and Administration without imposing a certain structure or dictating certain assignments not included in the structure of the developmental process.

The review and the study of law no.59 for 1979, concerning the establishment of the new urban communities, shows that the executive regulations of the law have not been issued. This was supposed to define and explain accurately the articles of the law. It would show how to execute the assignments entrusted to the NTDA through defined administrative procedures. No resolution was included to define the powers and the role of each NTDA as it is clear from the article (44) of the law no. 59 for 1979. Therefore, the authorities entrusted to the departments of the NTDA are defined and controlled by the higher powers of the central departments, each in its field, in the Authority of the New Urban Communities. The various policy of the new urban communities is decided by committees composed by resolutions from the chairman of the Authority. Hence, the Authority maintains the central control in the new town and sets their policies and land allocation for the various purposes. This Authority has been extended so far that it has issued some resolutions to allocate land to projects not included in the detailed or structural plan of some new towns. Example of this is what took place in the 6th of October city. In spite of having the detailed planning of the first stage and the time schedule of its execution, a number of resolutions were issued to include projects that had been listed in the plan of the city, the most important of which are: (26)

- 1. Allocation of three sectors for co-operative societies.
- 2. Allocation of a sector for embassies.
- 3. Setting-up a distinguished residential sector in the tourist's area.
- 4. Addition of a fourth industrial zone.

**<sup>26.</sup>** Prof. Mohamed Hosney Amin. Management and Development of New Urban Communities in Egypt: Findings of the seminar on the "economic and social development of new towns", Cairo, 7-10 April 1986. National Centre of Crime & Social Researches, Ministry of Reconstruction- Authority of the New Urban Community.

Resolutions were also issued to include new projects outside the planned urban area such as:

- 1. Bricks factors.
- 2. Cinema & T.V. city.
- 3. Stadium.

Furthermore, there are other policies and central decisions issued by resolutions of the Chairman of the Authority of the New Urban Communities in the period from February 1984 up till now concerning the following aspects:

- 1. Organizing and arranging issue of building licenses in the new urban Communities.
- 2. Working licenses and permits for practicing activities in commercial and industrial institutions and for shops.
- 3. Defining the duties and responsibilities of the offices which issue the licenses in the new towns.
- 4. Defining procedures of issuing licenses, documents forms and fees of issue of Licenses.
- 5. Allocating land to projects, housing and services.
- 6. Defining prices of land and housing units and rental value of services buildings and cultivatable land.
- 7. Following-up contracts with investors and beneficiaries and delivering land and housing units to them.
- 8. Following-up the organization of industrial, tourist and service projects and their time schedule.
- 9. Authorizing the chairman of the NTDA to sign deals and rents contracts for lands located within the new towns.
- 10. The economic feasibility study and pricing housing units and defining costs of the utilities and public services buildings, as to define the cost of the square meter of the building areas.

11. Public policies, particular for the execution of plans and its executive programs distribution among the projects and reports on the execution progress of projects and evaluation of performance, statistical data and information of the work. Then, come the techniques and modes of social development and the coordination between the Authority and the NTDA

Although there is no clear job description or defined administrative procedures for the assignments of the different positions in the organizational structure of the NTDA, it is concluded that the role of the NTDA is limited to being an executive authority for the policies put and defined for it by the central committees in the Authority of the New Urban Communities. Hence, the authorities of the NTDA is limited in deciding its policies. (27) This means that it is an executive authority and do not determine its policies. This has led to the emergence of several difficulties in the organizational and administrative structure of NTDA. Of these difficulties are:

- 1. As a result of not issuing the executive regulations of law no. 59 for 1979 of the new urban communities up till now, the Authority has been maintaining centralization control over the new towns and deciding the various policies for it. This has led to the failure of achieving autonomous and balanced socioeconomic and urban development of the new towns, and in setting a coordination between the execution of different projects in the different sectors of the new town.
- 2. The absence of clear and accurate definition of the assignments of the public departments and their sub-departments has provided chances for interference

<sup>27.</sup> Institute for Regional and Urban Planning, Cairo University, New Communities. A Comparative Study between Actual Executive and Theoretical Conception: tenth of Ramadan. Sadat. Fifteenth of May and Six of October. Ministry of Reconstruction, New Communities, Housing and Utilities, January 1987 (In Arabic).

And duplication between assignments of every department, in addition to the centralization of the administration in general.

- 3. There are so many departments affiliated to the key personnel of NTDA that represent a burden and obstruct their efforts in managing the new town development operation, in following-up projects execution and hinder their role in drawing the policies for the future of their new town. The key personnel of NTDA have been more involved in daily problems in such a way that they were taken away from their main assignments. Besides, some departments should not follow them directly such as the department of "Legal Affairs".
- 4. There is a lack of coordination between the different NTDAs which obstructed the transfer of valuable knowledge and practical experience between them. There is also a need for highly qualified staff required in some positions in the organizational structure, specially in the second and third level under the chairman of the NTDA. Furthermore, most of the existing staff are not settled in the new towns as they are working with temporary contracts.
- 5. Owing to the nature of the growth of the new community, the developing of the administrative organization is vitally necessary, as what is required for the first stage (Building & Construction) would not be required for the following stages of operation and settlement.
- 6. Adding new administrative units as need arises for the NTDA without having clear definite assignments for the existing units as well as the new ones. The lack of coordination between them affects the efficiency of managing the new town development.
- 7. The organizational structure is considered to be conventional as it is similar to other public departments of ministries, though it does not deal with conventional problems.

8. The plans and budget of the NTDA have neither annual nor sessional definite goals and they have no follow-up system like that known by "Management by Objectives".

- 9. There is no efficient system for data or information (data Bank). The data and information available of the different activities in the new towns are limited
- 10. There are no system for marketing, or data for defining costs, procedures, availability of services and facilities, etc. which investors need.
- 11. Though trading and real property affairs are a source of major finance to the new town, yet they are not considered as an independent department but as a part of the central department.
- 12. The absence of development plans, executive programs or a definite finance System correlated with them.

### 3.8 The Tenth of Ramadan New Town (case study)

# 3.8.1 Underlying Reasons for the Selection of Tenth of Ramadan as a Case Study

The Tenth of Ramadan was set up in 1977 as the first town the State established to achieve its new policy of having developmental areas on which a number of new towns can be built away from the green lands. The objective of planning was to build a self contained community and not an extension to Cairo. It was decided to consider it as an independent community in the form of an urban unit that can absorb the population, services and industrial activities.

The Tenth of Ramadan is the first experience of the new towns in Egypt. Its economic, urban and social development have reached a level that make it a good example to be evaluated. Several researches and studies have been prepared for this new town where it is easy to follow up the execution of its development plan. Moreover, a number of conferences and seminars manipulated this new town for rectification and evaluation. The new town has a basis of data and statistical information that can be taken as background for any revision or proposal for future development.

A good number of governmental and non-governmental authorities have taken great concern in the study of the management and administration approaches applied to the Tenth of Ramadan new town. Among those concerned are: the Agency of Studies and Researches in the Ministry of Reconstruction, the research department for new town and urban communities in the National Centre for Criminal and Social Researches, the Council of Construction Research, the Housing and New Communities in the Academy of Scientific and Technological Research, the architecture and housing department in the Public Authority for Housing, Building and Urban Planning Researches. Moreover, there are the planning departments and faculties at Egyptian Universities.

#### 3.8.2 The Tenth of Ramadan: Conception and Objective

The site of the Tenth of Ramadan has been selected outside the area of greater Cairo that occupies the dense social, political and economic centre. The new town lies in a desert area comprising a part of the reclamation areas east of the Nile Delta, north east of Greater Cairo. The site chosen for the new town lies on the desert road between Cairo and Ismailia, at a distance of 55km form the centre of Cairo. The area of the new town is about 56km2 and is estimated to have half a million resettlers by the year 2000.

The master plan of Tenth Ramadan new town sets its development strategy on the following objectives:

- Realization of balanced development through the synchronization of the industrial and the urban development so that the resettlers to the new town can find an opportunities for suitable work and housing that satisfy their needs.
- 2. Realization of housing programs adequate for the resettlers social and economic requirements, through the execution of the various housing standard and types that meet the different economic and social levels of the society.
- 3. Exploitation of the natural resources and potentials available for development
- 4. Flexibility and adaptability to the changing factors that would affect its development.

The planner puts the main goals for the first stage of the new town as follows: (28)

1. Establishing the first stage of the new town as an integrated self-sufficient Society through a balanced extendable urban structure to be successively connected with the next stage.

**<sup>28.</sup>** Ibid.

2. Creating potentialities of generating job opportunities in industrial, services and construction fields.

- 3. Providing the suitable industrial environment for attracting investments.
- 4. Providing the reasonable circumstances for living and housing, especially for those working in fields of services, industry and construction, that cope with their actual needs and capacity for payment.
- 5. Providing recreational, green and open zones with the possibility of utilizing them as a safety belt between the industrial and the residential zones.
- 6. Providing means of transportation and communication to the services in and out of the new town.
- 7. Prohibition of informal housing by emigrants especially the workers and labourers of construction.

## 3.8.3 Planning the Tenth of Ramadan between Theory and Actuality

The study of the Tenth of Ramadan aims at comparing conceptional theory and executive actuality in order to identify the effectiveness of the planning agencies and the development authority of the new town. The study covers the impact of the management systems of the new town development authority (NTDA), the Authority of the new the Urban Communities or Ministry of Reconstruction on the development of the new town. One of the goals is also to define factors affecting the administrative and organizational structures including job description for the personnel of the NTDA, and their working efficiencies, also, to evaluate the financing system applied and also the means and ways applied for attracting the inhabitants and other various activities to settle in the new town. Hence, it is important to present what was planned to be performed and what has actually been executed. This is done not only for the purpose of follow-up of execution, but, also for the purpose of investigating the relationship between the organizational and the administrative aspects and the development objectives. This is beside measuring the rates of urban, economic and social development in the light of the administrative perspective. It should be taken into consideration that

the new town development authority is subject to the public sector and its bureaucratic administrative regulations. The governmental agencies which put the planning of the new town did not take into consideration the mechanisms for executing the general plan and the detailed designs. It did not take into consideration also the requirements of the administrative agencies that would undertake the execution of these plans and the style of upgrading their level of performance. It is clear that the plans of the new town were prepared in a static form and not in a dynamic operational style able to cope with the changeable factors that meet the developmental processes. No consideration was paid to the administrative and regulation aspects of the new town development processes.

The organizational structure of the Authority of New Urban Communities is mainly based on how to execute the plans of the new town after they have been prepared and not as a development operation to attract the new settlers and house them in a new community. The evidence shows that the rate of accommodating the industries is high, while that accommodating the population is very low. The Authority with its NTDAs proved to be executive agencies more than managing a new human settlement. This is the result of being subject to an executive ministry, or the Council of Ministers. The authority deals with the elements of urban development as engineering projects and not as a process of resettling people, services and industries in an integrated manner. This means that it deals with the provision of services and industries without much consideration to the human aspect of attracting new settlers. The Authority provides permits, licenses, loans and dwellings for those who might want to live in the new town. Therefore, the authority of new urban communities does not adopt the objective of linking the provision of job opportunities with housing units together at the same time.

A comparative study would include what has been planned and what has actually been executed on the three aspects of urban, social and economic development.

In the field of the urban development of the Tenth of Ramadan new town the Five development stages were planned, in the preliminary report 1978, to reach the desired number of population estimated at half a million in 25 years. The first stage of the city was to be executed in 10 years. The Ministry of Reconstruction and New Urban Communities wished to increase rates of the development of the new town; the period of the first stage execution was reduced only five years. Hence, the stages of the development were distributed to only four stages; each takes five years (Fig.3.7).

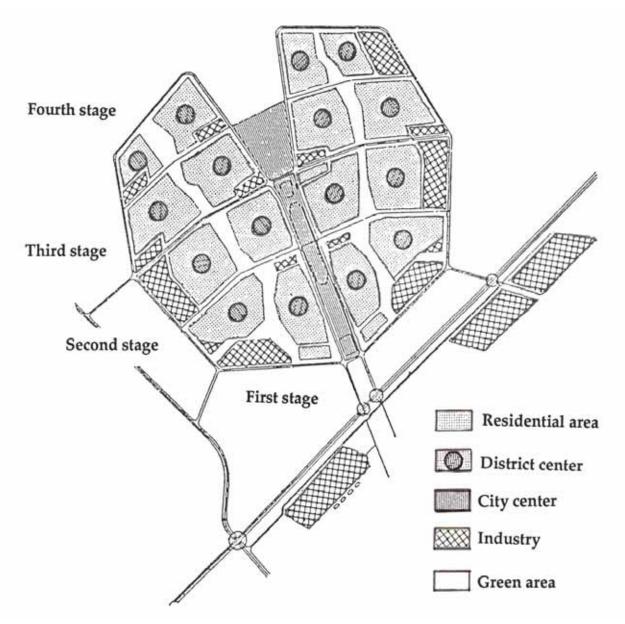


Fig. 3.7: Stages and Land Use of Tenth of Ramadan New Town

The planner took into consideration that the development of the new town is a continuous stage of urban, social and economic development. Hence, the first stage included the establishment of a part of the Tenth of the Ramadan in the form of an integrated city with a well-balanced structure extended and joined with the three stages. In spite of the expiration of the defined period for the first stage 1987, development now does not reflect what was desired as the following table indicates, Table (3.1) Fig. (3.8).

From the following table it becomes evident that the development of the Tenth of Ramadan new town was executed in a scattered and not a compact form. From the economic point of view, this is highly costly. This is partly due to the necessity of providing utilities, services and public transportation to the scattered areas, which are far from each other. This has been reflected on the social manner of development. It is impossible to realize a settled integrated society in residential

Table (3.1): A comparison between what was planned for the first stage and the current status 1989

As planned for the 1st stage		Current status 1989		atus 1989
-	Establishing four residential districts	×	Building of	75% of first district 50% of second district 25% of forth district
=0	Establishing 34 residential neighbourhoods subdivided upon the four districts	-	Work began	in establishing 6 neighborhoods in the 1st district 4 neighborhoods in the 2nd district 3 neighborhoods in the 4th district.
-	Establishing 4 services centers in the districts	2	<ul> <li>Work began in 1st district services centre</li> </ul>	
_	Establishing 34 services centers in the residential neighborhoods	ū	Work began in 9 services centers in the the neighborhoods	
-	Resettling of 150000 people	-	- 9000 have been resettled.	

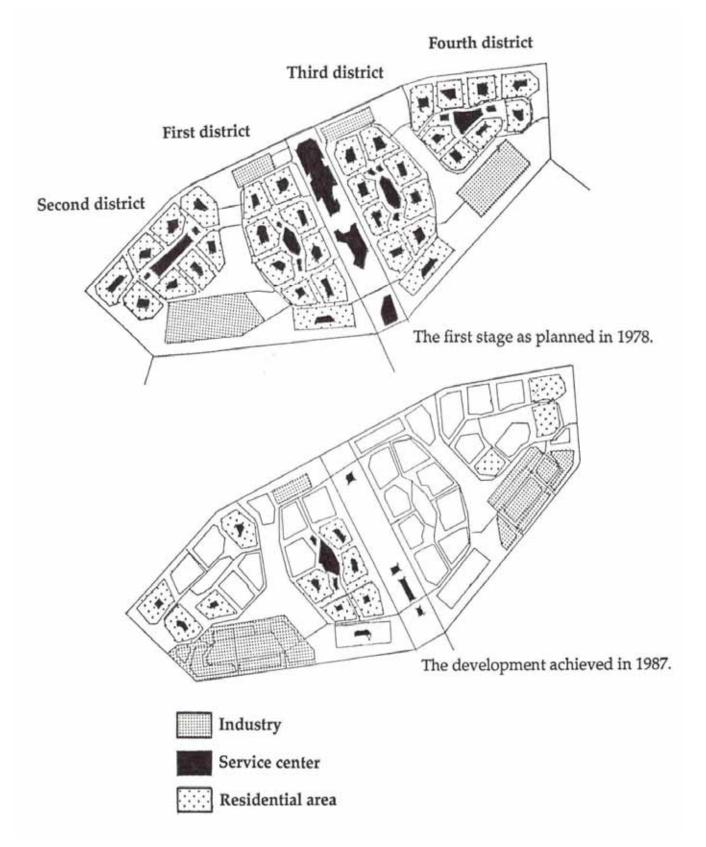


Fig. 3.8: A Comparison between What Has Been Planned and What Has Actually Been Executed

Districts where building and construction processes are going on for long periods. What has been executed contradicts with the conception of continuous and comprehensive development system. The executive agencies considered development of the new town as merely the execution of the building and utilities included in the general plan, without taking into consideration the sequential growth in the same residential neighborhood and, also, in the growth of a neighborhood one after the other. Besides, no consideration was paid to the socioeconomic development process which provides the new settlers with housing, services and job opportunities in an integrated manner. This indicates the inefficiency of the administrative concept of managing the urban development of the new town. This requires a good definition of the different stages of building up the administrative and organizational structure of the NTDA to cope with the stages of the new town urban development until it reaches the stage of local government. This requires the integration of the consultative operation of the various expertises in the organization of the urban development process over its different stages in order to reach alternatives and solutions for the problems which might arise during the urban development process. Particular concern is given to the impact of the political decision making process on the growth of the new town along time.

The first stage of development includes the number of plots allocated for the various housing units required for the expected economic standards of the new settlers, as shown in the following table (3.2).

The comparison between what was planned with what has been executed showed that 9901 housing units have been built in the first stage up to the year 1990 with a percentage of 30% of what was planned to be built. However, 30.5% of the executed housing units is considered housing units inhabited with re settlers and 54, 4% of the housing units have already been allocated but they are closed all the year round.

Table (3.2): Number of plots, housing units and the different housing types, as planned for the first stage.

	Housing types	No. of plots	No. of housing units	Total area
_	Villas and separate housings	1548	1548	120
	Row housings	3211	3581	72.5
-	Blocks of flats	1320	15658	1285
	Core houses	78584	7584	121
-	Site and services	4542	4542	57
÷ E	Total	18205	320914	499

From the fore-mentioned table, the variety of the proposed housing patterns is evident. However, the field studies have projected that 88.3% of the workers living in the new town settle in flats, about 10.7% live in villas and separate houses and the remaining 1.2% live in core houses. (29) The majority of housing units were flats because most of the core houses were sold to the owners of the industrial projects to be allocated, afterwards, as flats to their industrial workers. This contradicts the goal underlying this model of houses. It was planned that the worker 'Yould be handed the core house unit according to a model previously prepared. He can, then, develop it, as he requires. On the other hand, the site and services model has not been executed.

Accordingly, the evaluation of housing in the Tenth of Ramadan new town showed the following indications:

1. What has been executed represents a mixture of scattered houses and neighborhoods which does not cope with what was designated in 1978 plan.

**<sup>29.</sup>** Evaluation of the new urban communities, the second periodical report 1987, the Tenth of Ramadan City, the Regional Institute of Urban Planning, Academy of the Scientific Technological Researches.

This indicates that there is some default in the building and construction process. This matter requires the NTDA to have a more effective role in the organization, control and follow-up of the housing building processes.

- 2. As the type of the housing units in the 1978 planning does not meet the actual requirements of the tenants, so there is a need for building a certain limited number of the various types of the housing units in the first stage. The number is defined according to the expected number of inhabitants in the short run, five years term for example. These numbers could be changed, afterwards, according to the size of demand for the various types of housing units. This means that there should be a flexible housing policy that operates to provide the number of various types of housing units in order to cope with the changing circumstances and with the growth of population in the new town. It is, also, necessary to follow-up and evaluate the performance of using the housing units which the tenants have occupied, thus, to investigate how far they have realized the tenants social and living requirements.
- 3. The rate of construction in 1987 approximately reaches 700-850 housing units annually. It is a very low rate in comparison with what was already planned, Le. 7000 living units per annum. This is due to shortage of labor, building materials and efficiency of the new town executive and construction agency, especially in equipment and expertise needed for the supervision of execution. This is, also, due to the absence of programmed scheme for financing housing projects and attracting new settlers.
- 4. Most of the public sector constructing companies working in the new town does not comply with the execution contracts especially at the definite dates. This is due to the division of their efforts in a number of sites inside and outside the new town, without real definition of their available potentialities and capabilities for construction. This indicates default in systems and techniques

of the NTDA in supervising and following-up the operations of constructing companies.

- 5. The consultant planner of the new town did not take into consideration the real available potentialities for the new town construction capacity, in order to define the general time schedule programs of the projects. The consultant as well as the project executive bodies have not defined any detailed time program for every project separately. This matter requires the integration of the consulting expertise in the organizational and administrative structure of the new town development authority. Moreover, the experts of the NTDA should be present in the building and construction sites in order to treat the problems that may obstruct the development process.
- 6. The delay of the urban development process and the contrast between what was planned and what was executed due to the changing social, economic and physical factors. This requires the organization of a data bank for housing and urban development. This data bank aims at supporting the plans and programs of the NTDA by providing it with the information of prior experience in the field of housing. It aims, also, at co-ordinating the work at the level of the new towns in Egypt.
- 7. 12% of total housing units built in the new town have not been sold up till 1990. Besides, 54.4% of the total housing units are closed with no tenants because the method of selling these housing units encourages the rich people of whom the majority does not work in the new town to keep them closed. Hence, it is necessary to reconsider the policy of marketing houses. The NTDA should have a more effective role in making use of these unoccupied housing units. Its ownership should be restored if not occupied by tenants within a certain limited period if the law permits.

8. About 77% of the workers, who travel daily to the new town, amounting to 10700 persons, have the desire to live in the new town. They need 3700 housing units. But the high prices of these housing units which go beyond their financial abilities hinder the opportunities of habitation in the new town. This requires that the NTDA should follow up the population growth and its types, size of families, their economic and social characteristics so as to provide them with the suitable housing units. Financial subsidies can be extended to attract them to resettle in the new town.

The public utilities and infrastructure of the Tenth Ramadan city including all road and water-supply, networks, sewage disposal lines and electricity work have been executed in accordance with the general plan of 1986 and the detailed plan of 1987. On the other hand, 33% of the number of telephone lines (30000) needed for the first stage were executed. In the meantime, housing tenants in the new town did not exceed 7% of the planned number in the first stage. Establishing the infrastructure of the first stage is considered unused investments, inactive and exposed networks to loss or damage as being unused with no maintenance. This requires that the NTDA should cope the progression execution and extending of public utilities and infrastructure with the actual rate of the socio-economic and urban development of the new town.

The road network was built with the final coating while the building and construction process in the new town was still unfinished. Consequently, the use of trucks and heavy traffic led to the rapid decay of the upper coating of the roads. Paving the full width of the road, and not through phases, besides the low traffic density at the early stages led to the misuse of these roads with the required efficiency. Therefore, it has become necessary for the NTDA to work through phases in building and paving roads. Their width and their finishing should cope with the change of density of traffic. For instance, half the width of the road can be built and the other half to be built when required by the increase of density of traffic.

The last coating of the road can be left out at the beginning, especially connecting housing units with infrastructure from the main lines damages these roads. Besides, it is preferred to have the lines of the infrastructure network along the pedestrians paths, in order to facilitate their examination, inspection and maintenance. Hence, routes of transportation will not be disturbed.

The water supply network, which was completed for the first stage without being efficiently used for the lack of resettlers, will be consequently damaged and will diminish its life time. There should be phases in supplying potable water in accordance with the number of settlers in the new town. This phase plan should be taken into consideration when the urban plans of the new town are designated. For instance, at the beginning of the construction of the new town, water can be supplied by tanker-trucks to the housing units to fill ground then upper reservoirs. With the increase of the number of resettlers water can be supplied through main water lines in main streets with a joint distribution outlet among the housing units. Eventually delivery pipes can be extended from the mains to the housing units.

The sewage disposal network was designed to dispose the charge of 150000 people but the number of residing tenants did not exceed 7% of the fore mentioned number. This raises the possibility of the damage of these networks as they are not used for a long time. Besides, they may be blocked as volume of disposal is less than expected rate. Hence, the NTDA should take into consideration the phases of building the sewage disposal system. It should be built in accordance with the rate of increase of settlers and their potentials. For instance, separate or group joint trenches and septic tanks can be built for a group of housing units in the first phases of development. In the future, they can be connected and joined with the main sewage line. Afterwards compact units can be established for the residential neighborhoods and the sewage disposal network with all its elements and components can eventually be built.

The public services in the Tenth of Ramadan city include the social, educational, hygienic, religions, cultural, commercial and administrative services. The city plan took into account the following considerations on defining the volume of services:

- 1. Improving levels of services in the new town in order to attract more settlers. This can be carried out by extending distinguished services.
- 2. The residential neighborhood should be the main planning unit with a population capacity of 4000 to 6000 inhabitants. Every neighborhood should have a service centre.
- 3. Every district should be composed of 8 to 9 residential neighborhoods with a services centre big enough to meet the demands of the district.
- 4. Services are graded from the neighborhood centre to the district centre and gradually up to the new town's centre.

The following table (3.3) shows sorts and number of services, their sphere of influence and unit per person, as was planned for the first phase in 1976 and what was realized up to 1989. (30)

The fore-mentioned table shows the clear difference between what was planned to be realized in the first phase of the new town and what had been realized in 1989. It indicates that there was default in the system and technique of the management of the development process, including the follow-up and in the evaluation of the urban and population growth of the new town. This requires the change and amendment of the static plans in accordance with the changing circumstances to which the new town development processes are exposed. Besides,

**<sup>30.</sup>** Dr. Noha Fahmy: <u>Population Characteristics and Urban Circumstances of the Tenth of Ramadan City.</u> National Centre for Criminal and Social Researches, Department of new cities and urban communities researches, Cairo 1990, p: 246 (In Arabic).

Table 3.3: Comparison between the number and sphere of influence of service as planned for the first phase and what was realized in 1989.

	Desired for first phase		Realized in 1989		lized
Services	No.	Sphere of influence	No.	Sphere of influence	% of realized
Social services		= -			
* Nursery	60	Nursery/2500	4	Nursery/3250	6.6%
* Social unit	15	Unit/10 000	2	Unit/6 700	13.39
• Educational services					
* Elementary school	30	School/5000	4	School/3250	13.39
* Preparatory school	8	School/20 000	3	School/4500	37.59
* Secondary school	4	School/40 000	2	School/4500	509
Hygienic services					
* Medical center	4	Center/4000	1	Center/13400	259
<ul> <li>Health insurance</li> </ul>	2	Unit/80 000	1	Unit/13400	509
* Specialized hospital	1	Hospital/160 000	2	Hospital/6700	2009
* General hospital	1	Hospital/160 000	1	Hospital/13 400	1009
* Medical aid centre	8	Center/20 000	1	Center/13 400	12.59
Religious services					
* Mosque	30	Mosque/5000	11	Mosque/1200	36.69
* Church	2	Church/80 000	1	Church/13 4000	509
Cultural services					
* Cultural club	4	Club/40 000	1	Club/13 400	259
Public services					
<ul> <li>Police station</li> </ul>	8	Station/20 000	1	Station/13 400	12.59
<ul> <li>Post office</li> </ul>	30	Office/5000	3	Office/4500	109
<ul> <li>Central communi- cations office</li> </ul>	1	Central/City	1	Central/13 400	1009
* Petrol filling station	4	Station/40 000	5	Station/2680	1259
· Commercial services					
* Neighbourhood					
market	30	Market/5000	8	Market/1675	26.69
<ul> <li>District markets</li> </ul>	5	Market/40 000	1	Market/13 400	259

There should be enough flexibility and phases in the execution of services according to the real number and actual requirements of the population. The decrease of urban density in the new town has passively affected volume and distribution of the various services. Scattered urban development over a large area of land has affected the efficiency of services performing and has some residential zones out of its sphere of influence. In the tenth of Ramadan new town, the majority of the services are centered in semi-finished residential neighborhoods; 1, 2, 3,4,14 whereas in the rest of the neighborhoods services are nearly nil.

The NTDA established eight social service centers including nurseries to serve the first phase, but only two of these establishments are used for their original function. The other buildings are used for other functions such as a girl preparatory school, a religion institute, a teachers' institute, a cultural centre and a court. Moreover, two flats in a housing block are changed into nurseries. This shows the default in the management of the new town and the absence of co-ordination and planning in establishing the nurseries, and in using buildings that have been planned as nurseries for other functions. In the same way, the default lies in the use of residential flats as nurseries which contradicts the principle of function in architectural design.

It is noticed that basic education schools have been built including 46 classrooms as planned. But practically less classrooms were used. It becomes evident that the NTDA has been unable to make use of these schools as efficiently as required. All the schools have been built as one project and not in stages. It would have been better if they were designed in a way which makes them possible to develop and expand in accordance with the increase in number of settlers in the new town. This is reflected in the increase of students and hence the need for more new classrooms which can be built to complement the core school. Besides, building a number of classrooms and leaving them unused is considered as inactive Investment with no return.

Moreover, if these schools were to be used in other purposes rather than education, their function will be inappropriate.

Comparing what had been planned for social development with what have actually been completed, a study is needed to evaluate the population growth, sources of migration, the specific composition, and the social status of the resettlers. This study has to be prepared within the development process of the new town.

The population growth of the tenth of Ramadan city as had been planned in 1976 and the actual growth can be indicated clearly through the following diagram (Fig. 3.9) - (31)

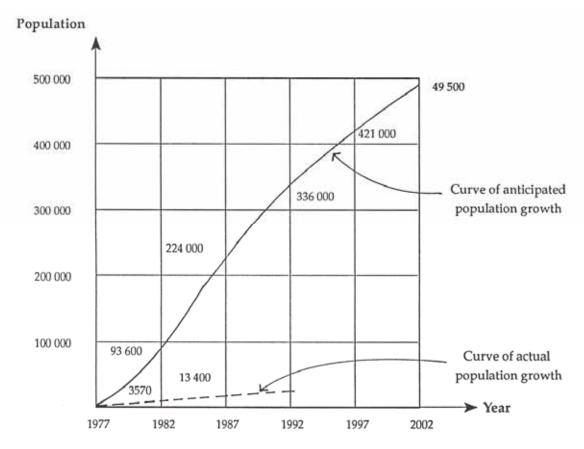


Fig. 3.9: Curve of the Anticipated and Actual Population Growth

**<sup>31.</sup>** Consulting Engineering Office for planning and Architecture (COPA), Swedish Consulting Group (SWECO), <u>Tenth of Ramadan City. First Phase.</u> General Report 1978, Ministry of Reconstruction and new communities.

The diagram shows that the number of inhabitants in 1981, three years after the beginning of development, reached 1190 people. It grew slowly in the first years of development. The growth in population began with the relative integration of utilities, services and industry. In 1986 the number of population reached 8526 people and rose to 13400 in 1989 with a percentage of 5.5% of the number of population anticipated to resettle in the new towns. A percentage of 8.9% of the number of population was anticipated to resettle in the end of first phase of the new town. The following table shows the number of population expected to be settled at the end of the first phase and the number realized in 1989 (Table 3.4). The survey is made at the level of the four districts in the first phase:

Table (3.4): Expected and realized number of population in 1989

Districts	Expected No. of population	Realized No. of population 1989	Percentage of realised	
First district	40 000	7376	18.4%	
Second district	35 000	4500	12.9%	
Third district	40 000	93	2.0%	
Fourth district	35 000	1420	4.1%	
First phase	150 000	13400	8.9%	

The following table (3.5) shows the expected number of workers in the main activities in the new town at the end of the first phase and the number realized in 1989. (32)

**<sup>32.</sup>** Ministry of Reconstruction, New Communities, Housing and Utilities, New Towns - Shining Marks on the Map of Egypt, December 1989, p: 216 (In Arabic).

Table (3.5): Expected and realized number of workers in 1989.

Districts	Expected No. of workers	Realized No. of workers 1989	Percentage of realised	
Industry	34 000	23287	68.5%	
Building and construction	12 000	3161	26.3%	
Services	42 000	2469	5.9%	

It is noticed that the realized number of workers, in the previous table, includes both settlers and commuting workers to the new town. Field studies show that 40% of them settled in the new town whereas 60% are daily commuters. Moreover, 77% of the workers commuting to the new town have the desire to live in it. Workers in the industrial areas represent 96% of the workers commuting to the new town. There is a lack in housing which is within their financial means. This at the time when 54.5% of the housing units built in the new town are unoccupied. These closed housing units can accommodate 22000 people. The low growth rate of the population in the new town is due to the slow growth rate of the settled industrial workers. This is consequently reflected in the low population growth of labor working in services and construction projects. Moreover, most of the workers are on temporary contracts which do not provide them with enough opportunities to settle and work. This reveals the default in techniques and system of managing the new town development owing to the absence of balance between urban, social and economic aspects of the development process. Besides, there is no follow-up or evaluation of the phases of the new town's growth. In addition, there is no modification in the policies or in the developments plans which can cope with the changing circumstances affecting the new town. Moreover, the NTDA did not succeed in providing suitable housing units appropriate to the financial capability of the workers in the new town, or in providing appropriate attractive factors aiming to increase the rate of settling. Besides, there are no well developed means

and ways for receiving the new settlers, informing them with all the data and information required and assisting them in their procedures to have housing units or services. This is due to the NTDA which deals with the development projects as construction projects and not as investment projects. The NTDA should take into consideration that the main objective of the new towns is the human settlement, within the Urban National Strategy.

The migrants to the Tenth of Ramadan new town compose the basis of the city population particularly in the first stages of its growth. The size of migrants from the various governorates refers to the areas and regions of evacuation, as well as to the power of attraction of the new town. As for workers commuting to the new town, 50% of them come daily' to the new town from Cairo, 40% from Sharkia Governorate and 10% come from the other governorate of the upper Egypt. Whereas for the workers settling in the new town, 30.9% of them came from Cairo, 19.3% from Sharkia Governorate and most of the rest come from Lower Egypt governorate. It is noticed that the distance between the home land of the settlers and the new town has a great effect on the number of immigrants and those commuting to the new town. Therefore, most of the population originally come from the nearest governorates to the new town. This requires that the NTDA should focus on these governorates to propagate the advantage of the new town, and to provide housing units, services and living conditions appropriate to the social, and economic level of inhabitants. expected to come from these governorates. Moreover, the NTDA has to provide means of transportation and road network to link the new town with populated areas in the surrounding governorate. This will facilitate the visit of the population of the rural governorate to the new town. Hence, they will get to know and witness the activities, achievements and advantages of the new towns. Building Heliopolis district in the desert and linking it with Cairo can b~ taken as a good example in that respect. On the other hand, settlers in the new town will benefit from these means of Transportation and road network in satisfying their needs of commodities and services not available in the new town, especially in its first

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Stage. Moreover, it will enable them to reach easily their relatives and friends in their home land. This will not be achieved unless the housing market is free from the present constraints.

It is worth mentioning that males in the new town represent 97.7% and females represent 2.3% of the total number of workers living in it. While males represent 92% and female represent 8% of the total number of workers commuting to the new town. In the Tenth of Ramadan city the average size of the family in 1989 was 4.3 persons, the occupancy rate was 1.6 person per room. The monthly average income of the workers living in the new town is LE 180 and LE 126 for those commuting to it. The average age of the inhabitants is 20 years. Of the town dwellers 59.7% have elementary and higher education, 84.7% of them are married.

As previously mentioned concerning the social development of the Tenth of Ramadan City there is a great difference between what had been planned and what has actually been achieved. This proves the failure of putting long terms plans and anticipations for the future. The plan prepared in 1976 for developing the new town is inflexible and does not cope with the changing urban, social and economic circumstances to which the development processes of the new town may be exposed. The plan of the new town estimated the number of settlers, their social structure and characteristics over the different development stages. This was guided by the example of the existing cities, with the assumption of the number and characteristics of the inhabitants expected to settle in the new town. However, in reality that was not the case, as most of what was expected was not realized. It was evidently necessary to put the techniques, styles and goals for economic, social and urban development of the new town without being bound to rigid planning previously designated. The development process of the new town should be carried out through flexible and well-balanced planning that can be modified according to the different circumstances to which it may be exposed. Such flexible plans should cope with the approved general objective and goals of the development process.

This requires the decentralization of decision making powers and minimizing the power and influence practiced by different central governmental bodies. The NTDA has to practice more freedom in the decision making process concerning the new town. There will be also a need for manuals to upgrade the administration performance in the NTDA.

The economic development of the Tenth of Ramadan depends on industrial projects as a base for the development of the new town. The general strategy of the industrialization of the new town depends of the following factors:

- 1. The provision of proper sites for the various types of industries.
- 2. The provision of many opportunities of work as possible in harmony with anticipated rates of growth.
- 3. The provision variation of skilled and semi-skilled workmanship opportunities and the teaching and training of unskilled labour.
- 4. Encouraging small industries and factories that need high labour density.
- 5. Encouraging small industries and factories that use local raw materials.
- 6. Giving great concern to the new industries run by modern technology.
- 7. Encouraging the development of local industries.
- 8. Encouraging domestic and foreign investments.

The general strategy did not focus on the necessity of providing settling factors for workers in the new town which is an important factor. It should have provided the means of getting suitable housing units. It should have stressed on the factors of attraction, benefits and services which the settling workers will enjoy in the new town. The main objective of the new town is settling the workers. There should be a balance between both the industrial growth and the residential expansion. Consequently the present situation led to the fact that 96% of the commuting workers to the new town work in industries.

**33.** SWCO, <u>Tenth of Ramadan. New Industry City. "Growth Plan 1982".</u> Advisory services for implementation and management assistance. Final report of January 1983, Agency of studies and Research, Ministry of Reconstruction.

# 3.9 Factors Influencing Urban Development of the Tenth of Ramadan New Town.

The urban development of the tenth of Ramadan was exposed to a number of factors which affected its rates of development, on the one hand, and influencing the nature of development on the other hand. These factors can be summed up as following:

- 1. Limited freedom for the NTDA in taking any procedure or resolution to deal with the changing conditions that may occur to the development process without referring to upper authorities, the fact which takes a long time or may fail to meet these new conditions, on time.
- 2. High authorities take political resolutions which may contradict the economics of urban development, such as to lower the prices of building plots to a considerable degree which led to the rapid sale of all the building plots in the first phase of development without being urbanized.
- 3. Expected number of settlers was stated for a long period of time, and accordingly the new town plans were defined. There was no chance to review, or to evaluate and then modify urban development processes over certain period of time annually or even every five years.
- 4. Owners of industrial projects didn't encourage the settling of workers in the new town. They provided means of transportation for taking the workers from old residential areas to the new town and returning them back. This is more economic than providing housing units for them in the new town. Moreover, most of the industrial workers have temporary contracts which do not encourage them to settle in the new town.
- 5. Some of the investors in the new town, after making use of the tax exempts granted to them for ten years, intend to liquidate business by selling or setting Up new companies to benefit once more from these exemptions.

This matter does not encourage the settling process in the new town, and does not encourage providing self-resources that help in the circulation of invested capital in the new town.

- 6. Urban development is considered as a construction process following the system of project management, and not an investment process aiming at increasing rates of settlers in the new town.
- 7. The NTDA cannot depend on self-financing its development projects and is unable to restore the invested capital, to develop the new town, in a direct or indirect way.
- 8. Some homeless settle temporarily in the new town where houses are available, till they have found a housing unit in the existing big cities. This leads to reverse migration. This is due to the factors of attraction found in the old cities more than in the new towns.
- 9. Urban projects in the new town are manipulated in the light of the investments defined by the Ministry of Planning for each project. The consultant for each project is selected by the Agency of Researches and Studies in the Ministry of Reconstruction, but he signs the contract with the NTDA. Urban projects are set for tender by the NTDA, but the Authority of New Urban Communities selects the contractor and gives him the assignment. The NTDA supervises the project construction according to time schedule indicated in the contract. Thus, the project's procedures circulate among various authorities, which led to the delay of projects execution.
- 10. The lack of experience of the directors and managers in the NTDA is due to the fact that most of them are assigned from outside the NTDA without acquiring experience from practicing in similar jobs. This hinders the Development process because they fear taking decisions and making moves that reflect their inadequacy in management.

11. The head of the NTDA as well as most of the directors live outside the new town, the fact which prevents them from living and coping with the requirements of the urban development process. Therefore they cannot manage the administration procedures because they spent short time in the new town. This does not help or encourage settling the employees of the NTDA in the new towns, but gives them the chance to look for other possible opportunities for work outside the new town. This is the fact which causes defect in the management of the urban development, and the inability of the employees of the NTDA to either settle or continue in their jobs as well as the lack of control and follow-up the development process

- 12. The inability to reach a permanent balance between the number of settlers and their requirements, especially services, throughout the phases of urban growth of the new town.
- 13. The NTDA works according to the financial and administrative regulations of the central government, without any chance for independence from following the system of "Management by Objectives" as in the case of investment companies. Consequently, the ministries of planning, finance and reconstruction as well as the authority of the new urban communities and the NTDA all interfere in all financial, administrative and executive steps and this hinders the work of the urban development of the new town to realize its aims and objectives.
- 14. Investments devoted to public housing are directed to build prototype housing units in the new town with no consideration to the size of demand. This leads to their vacancy for a long time without being used, which is considered a frozen investment. This also leads to losing the urban and architectural character of the new town.

### 3.10 The Transfer from Central Authority to Participation of the Private Sector

After more than eleven years from the beginning of the work in the new community, the "Tenth of Ramadan", it is considered the oldest new town constructed in Egypt. The settlement housing a certain number of settlers amounts to about 8% of the intended size of population after this period. In the mean time the size of industries built exceeds the size intended in the same period. This indicates the unbalance between the two main elements of urban development. The Authority of New Urban Communities then gave consideration to the demand of businessmen and investors who have located their factories in the Tenth of Ramadan new town to establish a local council for the new town. Through this council the businessmen and investors played an active role directing the reconstruction activities in the new town. In 1986 the Minister of Reconstruction, Housing, New Communities and Land reclamation (at that time) and the chairman of board of directors of the Authority of New Urban Communities issued the resolution No.101 to establish the trustees council for the Tenth of Ramadan new town headed by the deputy chairman of the Authority of New Urban Communities for economical, financial and administrative affairs and the membership of 18 members representing the following authorities: (34)

- 1. The Authority of New Urban Communities (3 members).
- 2. The investors association in the new town (6 members).
- 3. The authorities of services in the new town (4 members).
- 4. The workers in the industries in the new town (3 members).
- 5. The housekeepers in the new town (1 member).
- 6. The youth in the new town (1 member).

**<sup>34.</sup>** Ref: Resolution No.: 101 for the year 1986, Minister of Reconstruction, Housing, New Urban Communities and the chairman of the board of the Directors of the Authority of new urban communities, issues in 18-5-1986. (In Arabic).

It is obvious from the above formation that the investors association and the workers in their factories represent half of the total members of the council, while the public authorities are represented by seven members, and two members represent the settlers. The relative importance of the investors association in taking decisions for this council is evident. The association becomes a relative pressure force in favour of its private interests without any similar appreciation to the importance of increasing the new settlers as the main objective of establishing the new towns as new communities and not as industrial areas.

The trustees council of the town assumes its assignments and responsibilities as follows:

- 1. Proposing the necessary outline and programs for the development projects and follow-up their implementation.
- 2. Assisting the new town development authority to implement the construction plan in its different stages.
- 3. Participating in preparing the development programs of service authorities.
- 4. Proposing a stable and clear policy for the new town development according to Short and long term plans.
- 5. Solving the problems of the settlers as well as the problems impeding the investors work especially those dealing with the relationships between the new town authority and the other authorities.
- 6. Planning for the best way to develop and invest in the new town resources and supervising the development projects that can be implemented by local investors.
- 7. Setting the recommendations and proposing the systems that ensure achieving the balanced and comprehensive development in the new town for the following fields.
- i. Assigning the lands for the different projects including housing and service buildings within the approved planning frame work.

ii. Setting out the general rules to manage and utilize the lands, in the light of the related laws and regulations and proposing the implementation Priorities in order to achieve the co-ordination and integration of the different projects.

- iii. Setting the necessary procedures to maintain and manage the state properties and to regulate their investment and disposal.
- iv. Settings the rules for granting the rewards to the workers of development and service activities.

It is evident that the goals of the trustees council cope with the goals of the investors association which represents half of the council members. The council assignment and responsibilities do not refer to increasing the factors of attraction to the new town as it failed to accommodate the planned number of settlers. These assignments did not also refer to the necessity of raising the performance efficiency of the personnel of the development authority in order to ensure the proper services for the new settlers and to provide them with work opportunities. The majority of the employees in the industrial projects dwells outside the new town, as well as, the employees of the new town development authority who are expected to be the first to settle and dwell in the new town. The main objective of setting a new town is to attract new settlers. This is still outside the concept of the organization and administrative structure of the NTDA, as well as the goal of the trustees council

The trustees council does not hold the role of a local council. It does not satisfy the full participation of the new settlers in managing the development process of their new town. This requires the reformation of the trustees council so that half of its members represents the new settlers, a quarter will be chosen from the official of the authority and the rest presents the investors with this relative balance, the participation of the new settlers can be enriched in developing the new communities. The participation of the new settlers is not only limited to the administration level, but it extends to planning, design, construction, operating and maintenance of the public facilities and services. The new settlers should have the priority in managing their town when they reach the adequate number as residents.

### 3.11 Developing the Management of New Urban Communities

The development of the administrative and organizational structure of the New Town Development Authority may be based on three main points:

Developing the concept and technique of development and consequently developing its administration system.

- a) Developing the operational system and upgrading the performance standards of all evolved in the urban development process.
- b) Developing the procedures and methods adopted by the NTDA and those dealing with it.

The concept and technique of urban development can be developed according to two main approaches: The first starts with the preparation of a fixed general plan for the new town after the selection of its site within a regional context. The detailed plans for the various zones are to be planned according to priorities defined in the general plan. This includes building regulations investment incentives and factors of attracting new settlers. Urban development can be done by the state organizations which are committed to the administrative, organizational, financial and legal limitations of the State. This can be realized by joint stock companies operating with more administrative, organizational and financial freedom but committed to the legal commitments of the state.

In both cases, the suitable structure is defined for the urban development processes and for the functional relations between their elements. Accordingly, the suitable administrative and organizational structure is set with defined assignments and qualifications required for its performance. Assignments are defined for every department in the organizational structure. Job description is to be prepared for every position in each department. The administrative and organizational structure is to be built in accordance with the different stages of urban development.

Administrative manuals have to be provided to guarantee the efficient performance of the staff.

The second approach begins by setting the main outlines which realize the objectives of the development process of the new town as a continuous operation aiming at building the social, economic and physical components of the new community in one comprehensive manner, in order to face the changing factors that affect development. The urban development process is based on the organic growth of the new town during its different phases. Accordingly, the administration and organization structure of the new town can be built and modified to cope with the different phases of the organic growth of the new town. Consequently, the assignments of every division of the administrative structure can be defined and modified together with the job description for every working position. Manuals have to be provided to enhance the work and upgrade level of performance in the New Town Development Authority. These manuals present all the detailed administrative operations of the various activities in the urban development operation. These manuals, dealing with urban development as a continuous and changing operation can be modified according to the changing political, economic, social and physical circumstances to which the new town development may be, exposed.

# **Evaluation of the Present Status of Managing the Development of New Towns in Egypt**

The review of what has been accomplished in the evolution of the development of the new towns and urban communities in Egypt, whether at official levels or through the studies in this regard led to the following. At the official level a committee has been composed in the Authority of the New Urban Communities to study the ideal technique for the management of development of the new towns. The investigation committee has been assigned to find the following:

- a) Investigate the ideal composition of the new town board of directors.
- b) Define the authority of the chairman of board of directors including his abilities and assignments.
- c) Define the internal system of the board of directors and its assignments.
- d) Clarify mutual relationships between the board of directors and the Authority of New Town Development on one side and the departments of the services operating in the new town on the other side.

The investigation committee studied the evolution of the NTDA in order to become an investment company entrusted with the development of the new town. To approve the principle of changing the NTDA into a company should be supported by the past experience as of Ma'adi new town, Heliopolis, Mo'kattam, Ma'amora and Nasr City. The past performance of these companies including factors of success or failure should be carefully analyzed and studied in order to define the conditions that can guarantee the success and effectiveness for the new companies without repeating the errors of the past experiences. (35)

It may be useful to change the NTDA into an investment company through stages. In the first stage wider authority can be provided to the NTDA, with the composition of a board of directors representing the top authority in the new town. Its affairs are managed on the same standard of the management of investment companies. In a later stage the legal status of the company can be given to the NTDA with all the administrative and financial responsibilities.

The administration system of the new towns cannot be identical or similar to the administration system followed now in the old towns or cities such as Cairo, Alexandria and others.

**<sup>35.</sup>** Prof: Mohamed Hosney Amin. Management and Development of the New Urban Communities in Egypt. Findings of the seminar on "the economic and social development in the new town". Cairo.7-10 April 1986. The National Centre for Criminal & Social researches (In Arabic).

The required system should cope with the development programs and projects during their preparation, execution and operation. The board of directors, therefore, should include experts in the manipulation of the development problems. The chairman and members of the board of directors in every new town should be carefully selected.

The investigation committee has reached the system and technique proposed for the administration structure of the new towns as spelled out in the following items:

### I. The Composition of the Board of Directors

At present, every new town has its executive agency which is entrusted with the implementation of projects. It communicates directly with the Authority of the New Urban Communities and follows its resolutions. It is recommended that the new town should have a board of directors to supervise the executive agency.

### II. Terms of Reference of the Board of Directors

The board of directors of the new town is the authority responsible for the Development process. It is entitled to adopt the resolutions appropriate for realizing the goals for which the new town is planned as an integral community.

The board of directors has the most competent authority for the management of the new town, except for what is stated by the law of the Authority of New Urban Communities. The board of directors should be assigned for the following activities:

1. Drawing the policy and preparing the plans and programs of urban development projects in a coordinated manner. Designating the policy and programs of services and productive projects. Participating with the board of directors in the Authority of the new urban communities.

2. Undertaking the execution of the plans designed for urbanization and

solving the financial and technical problems as well as the evaluation of

the achievements accomplished at certain intervals of time.

3. Proposing the annual budget together with the preparation of short,

medium and long-term plans of the development projects in co-ordination

with the Authority of the new urban communities.

4. Preparing the annual closing accounts of the new town.

5. Certifying the regulations which conduct local bids, auctions, tendering

and contracting by direct order.

6. Reviewing the periodical reports on the work progress and the financial

position.

7. Approving the appropriation of land to projects, dwellings, services

premises and other purposes in the plan decided for the new town

according to the priorities of execution of projects;

8. Certifying the general rules for land management and investment and how

to dispose them in the light of the governing rules and regulations.

9. Giving view-points on investments entrusted to the NTDA and putting

priorities for its execution.

10. Adopting all procedures necessary for securing the state's properties,

managing them, organizing their investment and disposition, as well as

preventing intruding according to the law.

11. Deciding granting of bonuses or reward to the personnel and the staff of

NTDA and drafting rules for appointing and employing them. Drafting

system for training and procedures of granting incentives, as well as

payments to workers according to their rates of performance.

12. Considering what the Chairman of the Authority of the New Urban Communities would present on affairs related to the authority of the board.

- 13. Drafting special regulations to organize the work and meetings of the board and the distribution of responsibilities among its members.
- 14. Estimating the attendance allowance of the members of the board who are not working in the NTDA.
- 15. Appointing the secretary general to the board from among its members. It is preferable that the secretary be responsible for the development process of the new town.
- 16. The board has the right to compose a committee or more from among its members entitling them with some of its responsibilities. It can, also, entitle the chairman or his deputy some of its responsibilities, in order to realize a certain goal. The board has the right to compose an executive committee to consider and investigate work problems presented by the Chairman.

### **III. Members of the Board of Directors**

They are 19 members selected as follows:

- 1. President of the New Town Development Authority or the director general.
- 2. Head of the central department of financial and managerial affairs in the NTDA
- 3. Head of the central department of development in the NTDA.
- 4. Representative of each ministry whose work has direct contact with the new town. They are the heads of the central department of the governorate to which the new town will be affiliated after it reaches the optimum size. A resolution is issued by the head of the Authority of the New Urban Communities, for their appointment, in accordance with the nomination of the relevant ministry (Ten ministries).

#### These ministries are:

- Ministry of Higher Education
- Ministry of Education
- Ministry of Public Health
- Ministry of Electricity
- Ministry of Interior
- Ministry of Supply and Commerce
- Ministry of Social Affairs
- The High Council of Youth.
- Ministry of Industry
- Ministry of Communication
- 5. Three representatives of investors elected from those of the new town.
- 6. Three representatives of the new settlers to be elected from the settlers of the new town.

#### IV. Chairman of the Board of Directors

- 1. From the distinguished persons working in the Ministry, or other public personalities. He should have the ability of decision-making for solving the problem that may obstruct work.
- 2. Have a distinguished job grade if he is a government official or an inclusive reward if he is from outside the Government. On the nomination of the board of directors of the Authority of New Urban Communities, the Prime Minister issues a resolution to appoint and determine his salary and allowances. He should be represented in the board of directors of the Authority in order to realize the co-ordination between the policy of the NTDA and the Authority.
- 3. Be wholly devoted to the assignments of his position, and live in the new town. In case there is a director general who acts as NTDA similar to the company's managing director he should be always resident in the new town. The Chairman of the board of directors in this case is not obliged to reside in the new town.

### V. Assignments of the Chairman of the Board of Directors

The chairman of the board of directors has all the executive powers and authorities entitled to the President of the Authority of the New Urban Communities within the new town. His competence and powers include the authorities of the head of agencies and utilities in the new town.

He is regarded as the highest authority of the new town. He has the widest authority in implementing the resolutions of the board beside the following activities in particular:

- 1. Executing the resolutions of the board of directors.
- 2. Supervising the work of the executive departments and, upgrading their administrative procedures and systems in order to enable them to undertake the assignments entrusted to them.
- 3. Appointing the personnel and staff or employing them by delegation to work for certain time within the allocated budget according to the actual needs of work
- 4. Ensuring the efficiency of work in different activities and improving the services and production sectors.
- 5. Adopting all possible procedures that will secure private and public real state and removing any administrative obstruction they face.
- 6. Calling the board of directors to meet, at least once a month and preparing all reports, topics and findings to be submitted to them.
- 7. Controlling and co-ordinating between the agencies and the bodies whose authorities have not been transferred to the board of directors, except the judicial authorities.
- 8. Approving and issuing the resolutions for the promotion of the executive staff in the NTDA.

9. Delegating some of his powers and responsibilities to service units and to

head of the executive agency.

10. Representing the authority before courts.

VI. Secretary of the Board of Directors

This position is usually given to a competent personality in the field of

development. The Chairman of the Board of Directors issues the resolution of

his appointment.

VII. Assignments of the Secretary of the Board of Directors

The responsibilities assigned to the secretary of the board are as follow:

1. Preparing the proceedings for the board of directors and preparing the note

and information needed for them.

2. Sending invitations for the members of the board for meetings and

informing them of the related agenda according to the instructions of the

Chairman.

3. Writing down the minutes, discussions and resolutions of the board in a

special record prepared for this purpose to be signed both by him and the

Chairman.

4. Informing all who are concerned with the resolutions adopted by the Board

and following up their implementation.

5. Supervising the personnel and staff of the board of directors.

6. Preparing progressive reports on the operation and the running of work in

the various sectors of development and services.

7. Preparing the summary of findings by the committees appointed by the

board of directors.

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### VIII. The Management System of Work in the Board of Directors

The board of directors remains for three years starting from the date of the first meeting. The membership of the elected members is renewed by election 60 days before the end of the period of the Board. A headquarter is prepared for the board of directors and its committees. Also, any staff needed is to be employed to guarantee the efficiency of work.

The board of directors meets every month in its headquarter on a call from its chairman. In some cases, the board can hold emergency meetings on a call from its chairman or from two thirds of its members. If needed, the board can hold meetings outside the new town. These meetings cannot be considered valid unless the majority of its numbers are present. The resolutions are passed by the absolute majority of attendance. When votes are equal, the president's vote would be the casting vote. The resolutions adopted by the board of directors are considered final after being approved by the Authority of the new urban communities. The resolutions adopted by the board should be communicated to the Authority during a week from issue in order to be reviewed and ratified or commented on during ten days from delivery to the Authority. If the board does not receive any related reply or remark in the indicated period, these resolutions are considered final and effective.

The board of directors should be informed before the transference of one of his members from his office. It should also be notified before taking any disciplinary action against them if they are from the staff of the government administrative system or from the public sector. The Board puts the internal Regulations, including procedures, to be followed when submitting proposals to it as well as the procedures of submitting inquires replies and briefing requests.

#### IX. Assistance Extended to the Board of Directors

The Board of directors is assisted to be a consultation office which employs consultants to design the new town. The Board, therefore, can undertake its role efficiently. Other consultants outside this office can be sought for giving consultation on certain subjects when needed. In this case, groups of experts and specialists should be appointed to cover all aspects relevant to development activities. This can be effective in the form of a central consultant group within the headquarters of the Authority of the New Urban Communities. The board of directors can seek the assistance of one or more of the members of this consultant group when needed, in order to avoid multiplicity of agencies with higher cost. The following diagram shows the proposed organization structure of the new town board of directors (Fig. 3.10).

Several proposals have been .submitted to the authority in an attempt to enhance the development process of new towns by unconventional technique. This technique takes into account the following points: (36)

 A director is to be appointed for the administration of the new town. He should have leadership capabilities with administrative and technical efficiency plus experience in the field of development. It is preferable to be personnel from the business sector. He must be given the powers of a governor or the minister concerned.

**<sup>36.</sup>** Eng. Salah Mohamed Dewidar. <u>Towards an Evolutionary System for the Administration of the New Towns.</u> AI-Akhbar Newspaper 21/8/1991,p.5 (In Arabic).

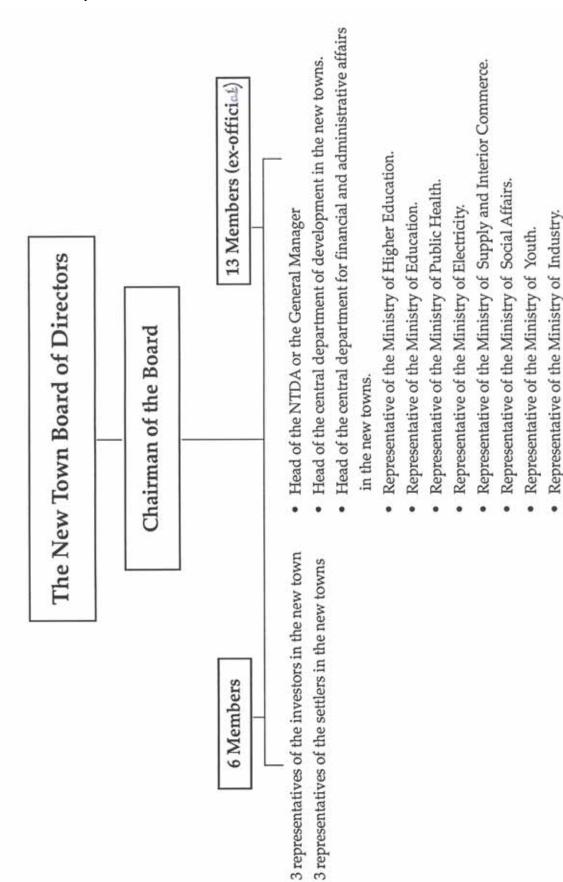


Fig. 3.10: The proposed organization structure of the board of directors in the new towns.

Representative of the Ministry of Communication,

2. A local council is to be composed for the execution of the new town. Half

of its members is elected from the new settlers, and the other half is

appointed as representatives to the various businessmen investing in the

new town.

3. Private companies can be established to run the utilities and services in the

new town such as electricity and water supply, local transportation and

markets. These private companies are to be established in collaboration

with the new town's board and investors. These private companies can be

developed gradually according to requirements. They will not be subject to

the state budget and will have the ability to progress rapidly and meet the

changing circumstances which the new town may face.

4. Greater concern should be given to the co-operatives to provide the

services to all districts of the new town. The new settlers should be

encouraged to join the co-operative societies which are to be represented

in the proposed town council.

5. A permanent staff should be appointed to design the urban and

architectural form of the new town in order to give it a distinguished

character. Members of the permanent staff are to be represented in the

local council of the new town.

6. Each new town should have its budget separate from the budget of the

governorate to which the new town belongs. The new town, therefore, can

maintain its independence away from the interference of the governorate

and hence keeps its distinguished character as in the case of Heliopolis

new town. The budget of the new town can be self-financed from local

resources or from any other resources decided by the State.

It is obvious from the previous approach, that it is based on developing the existing situation through setting a board of directors to the new town and defining their responsibilities, or through modifying the responsibilities of the NTDA, or through the participation of private sector in the development process. This approach is considered as a general proposal aiming at developing and changing the existing administrative structure of the new towns organization to private investing companies. This trend copes with the economic changes in the state which aims at the privatization of the public sector.

However, these proposals didn't take into consideration the importance of providing incentives and special facilities for the new settlers, and encouraging their participation in the development process. The development operation of the new towns is to be considered a continuous process, which requires special care in its first phases. It also requires setting a well organized administrative structure, with its financial resources which could provide utilities and services. The later phases of development require different needs for attracting investments, providing unique settling incentives with the participation of new settlers. It is important to rebuild the organization and administrative structure of the new town development authority in order to integrate the social, economic and physical aspects of development as dynamic process which can modify itself in order to deal with the changing and uncertain political, economic and social circumstances that affect the decision making process in the different phases of development.

### 3.12 Techniques and Modes of Urban Development of the New Towns

The international experiences in the development of new towns shows that the basis of success of techniques and modes of the urban development can be presented in the following points:

- 1. The policy of developing a new town has to be included in a comprehensive national urban policy, or at least, in a regional policy.
- 2. There can be an authority or a ministry assigned to plan and develop these new towns and act as an umbrella under which all other sectors or relevant ministries can operate. The efforts of these ministries, which are different in time and location, can be integrated and co-ordinated in the development process. This will facilitate the management of new towns development and the control of all its urban projects.
- 3. Attract the different kinds of industries which create various work opportunities that suit the new settlers with regard to their social, educational and skill levels. This will increase the rate of immigration to the new town.
- 4. The attraction of industries could be achieved by the provision of adequate sites provided with utilities and served by means of transportation and road networks. The taxation on these industries in the new towns can be reduced, and at the same time new taxes can be imposed on industries in over-populated centers. (37)

**<sup>37.</sup>** Academy of Technology and Scientific Research- Council of Researches of New Communities. <u>Evaluation of new urban Communities-First report</u>, March 1986: Study of scientific experiments- Institute of Urban and Regional planning" Cairo University. (In Arabic).

5. The site chosen for a new town preferred to be neighboring to a settlement to act as the core to the new town. The availability of services and infrastructure in the existing settlement would assist in reducing the costs of providing them in the early stages of the growth of the new town.

- 6. The site of the new town preferred to be located on a main road to connect it with the other larger urban centers within the country. This Will assist linking it with the other regions especially in the early stages of construction. Meanwhile the new town can be independent and rather separated from the larger urban centers which may affect its social independence. This social of independence is not important in the early stages of development until it reaches its self-sufficiency.
- 7. There should be a balance between housing, services and job opportunities in the new town by co-ordinating the different sectors and ministries through the authority of the new urban community or other similar agencies. This eventually will help the creation of a homogeneous community.
- 8. The development of a new town should depend on a number of financial resources. The most important of which is the direct government finance whether from the central or local government. Then comes the loans from financial institutions, banks, non-profit organization and the private sector. This can be achieved, also, by selling lands to the public and private investors.
- 9. Investments preferred to be in the hand of the New Town Development Authority and not in the hand of the central government in order to give it more freedom, away from the complexities of the government routine. This will facilitate the co-ordination between the different sectors involved in the development operation by guiding investments to each sector according to its needs during the different stages of development.

10. The New Town Development Authority can attract investments through the following channels:

- a) Reducing taxes on industries established in the new town.
- b) Providing large areas for industries provided with all required services and Utilities.
- c) Selling land for housing and services to the private sector at reasonable prices with facilities in payments.
- d) Providing services at a high standard to attract more settlers.
- e) Raising the salaries of workers in government and public sectors.
- 11. Subsidizing low income housing as the private sector is usually not interested in building such houses, since no high profit is gained from them. The provision of low income housing can be considered in the feasibility study of the industrial projects.
- 12. The New Town Development Authority has to follow carefully the growth and development of the new town along the rapidly changing economic, political social circumstances. There should be a good follow-up and control system so that the plans and policies can be changed and adopted accordingly to the problems that may emerge. This requires a flexible planning.

The management of the development of new towns in Egypt is still a new experience, and not the conventional system of operating big projects. The management of the new town development needs an evaluation in the technique as well as a new approach to cope with the changing factors that may occur during the different stages of development. The New Town Development Authority has to develop and enhance its techniques and modes of managing the development process in order to achieve the following goals:

## 1. Achieving the principle of autonomy in management, solution-finding and self-finance.

This means that every new town will have its entity, characteristics, and self finance resources to finance its projects. The role of the executive authority will be to supervise policies and activities and ensure its commitment to the National Urban Development Strategy and to satisfy the goals of the new urban community. This will not come into existence unless the owners of the industries and labour leadership, in the new town, have complete faith in it and apply this principle to themselves. This requires establishing a council in every new urban community with third of its members annually renewed to allow new members to enter the council. This council will have its self-finance resonances whether from contributions or from fees of some services. Such resources will support autonomy projects in the new town. The council eventually will have a role in the management of the development process. (38)

### 2. Setting Centre for receiving new settlers.

All new settlers will join in this centre once they decide to settle in the new town. They will be given lectures, training course and they will meet the representative authorities in the new town. New settlers will learn, in this center, the main objectives of establishing the new town, the policy adopted in managing the different activities and all the administrative procedures the settlers will deal with. Every settler will register in this center his/her name, social status, career and the field of activity he/she would like to volunteer in. Each settler will get a card with a register number. Cultural and social centers will be also built and provided with means of communication, computer and qualified staff, to following-up, supervise and evaluate the social and cultural changes that will take place in the new community. These centers will contact

**<sup>38.</sup>** Salah Mohamed Dewidar, article on "New Cities: Urban Communities or Building Structures", AI-Ahram El Ektisadi, issue 1076, 28 August, 1989, p: 14 (In Arabic)

Similar centers in other new towns in order to exchange information and experience aiming at upgrading the social life of the new community.

### 3. Adopting the Concept of Self-Sufficiency in the new town:

The main objective of setting up the new towns is to attract the population from the existing old cities to settle in them. Therefore the new town has to provide all the services, infrastructure, houses and job opportunities possible to attract the new settlers. The new town depends mostly on the existing cities during the first phase of its development where most of the requirements are not yet available. Accordingly the new town has to provide different trades and productive activities such as:

- 3.1 Providing trades and industrial activities like small workshops for small investors and larger industries for large investors. Cooperative societies can play an effective role in this area. These societies can manage and run their activities in a proper way through effective planning systems. They will have their own terms and conditions of organizing their work and help integrating productive as well as services and housing activities.
- 3.2 Providing agricultural activities whether in large or small farms attached to the new town. Training centers could be established to provide the information, equipment and experience required by the new farming settlers to help them in cultivating the availability arable land to provide the new community with agricultural products. A call for "A farm for each factory" could be stressed as a development strategy. The size of each farm could be related, in theory, to the number of workers and staff of each factory. Each factory can organize an agricultural society to run and cultivate its farm. Agricultural products could be available regularly at reasonable prices. This will enhance social coherence in the new communities and strengthen the feelings of belonging to the new land.

# 4. Developing the Internal Transport and Movement System in the New Town

Besides the local transportation system great concern should be given to cyclists by providing the suitable tracks for them. Bicycles could be available at suitable prices with convenient terms for payment. Pedestrian movement should be encouraged wherever possible by providing foot path lined by trees. This will help preserving the environment from the pollution produced by the conventional means of transportation. Internal transportation and movement system should be carefully planned in relation to shopping streets on one axis and the services on the other.

# 4. UPGRADING THE MANAGEMENT OF NEW TOWN DEVELOPMENT IN EGYPT

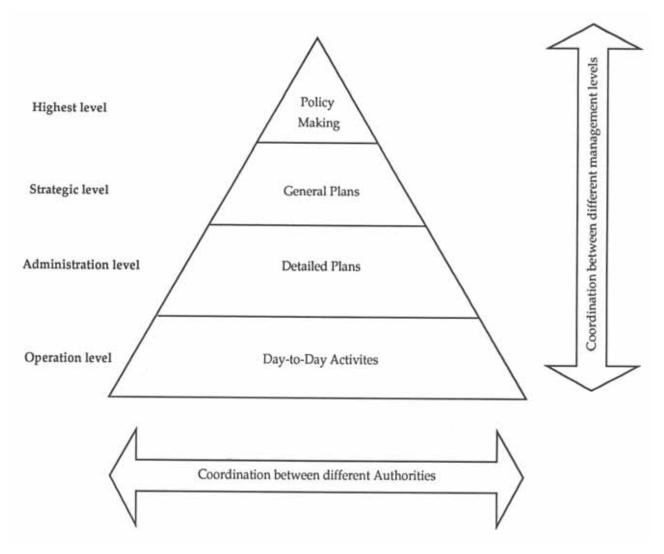
# 4.1 Levels Approaches and Functions of the Development Process in New Towns

### 4.1.1. Levels of Management

It is difficult to manage the development process of a new town because of its size and complexity. It demands sizable investments on a national level. This requires highly qualified direction and cost control of the substantial investments involved. The development of the new town is not primarily a construction project; it concerns people as well as productive and services activities which have to be motivated and stimulated. The management performance of the new town must be of outstanding quality in order to avoid the problems of poor co-ordination and performance. The management process has to be capable of bringing the different components of development into equilibrium whenever the implementation of the new town falls short of the initial projection.

The complexity of the development process of the new town including the technical, social and economic undertaking requires a well organized development agency. The management system plays the most important role for all involved functions in the implementation process. This management system covers the four following levels: (Fig. 4.1)

- The highest management level where the decision to build new towns is taken. At this level the time horizon for implementation is defined (25 years). The development of the new town is considered as a long term project with a beginning and an end.
- 2. The strategic level where the preparation of plans and guidelines of the execution of the projects is done. The decision taken on this level will be transferred to the administration level for implementation.



- 3. The administration level where detail planning, designs, coordination, execution and controlling are performed. The heads of the departments at this level will guide the activities on the operational level.
- 4. The operational level where day-to-day activities are performed by departments and divisions within the so-called "line" organization which defines the working relationships between departments for each specific procedure. In this case management manuals become important in order to define the authorization and responsibilities of the respective departments and divisions. The manuals do not include only the job description of each position in the implementation units but they illustrate, in details, the way the different procedures are to be carried out.

Cooperation and coordination are required vertically between the four levels and horizontally between the different authorities concerned at each level. This concept requires a very effective organization structure. The organization structure of a new town is not to be built as a government agency but as a development investment company with a reasonable government share.

# **4.1.2** The Proposed Management Actions for the Development Process of New Towns in Egypt

The implementation of Master Plans for new towns requires a highly qualified management at all levels. Effective actions are needed for the reorientation of the town plans when needed. Management manuals are supported by transferring working methods to continuous and intimate cooperation between actors concerned. The concept of balanced and rapid growth is a way of expressing a desire of equilibrium between supply and demand in the various economic sectors in the new town. These sectors include housing, public infrastructure, public services and industrial land, etc... The main objective of the new town is to be independent with an economic base of its own and thus not to be a suburb to a big city.

Specific actions for the management of development process could be listed in the following points, as derived from the experience of the Tenth of Ramadan: (1)

1. To review and revise the plan every year and improve management routines for control and steering of the development services, employment and Economy in order to enable the coordination of all efforts. This is besides a clear cash-flow system showing the sources and application of all funds for the new town.

Ref: SWECO, <u>Tenth of Ramadan. New Industrial City.</u> "Growth plan 1982". Advisory services for implementation and management assistance, Final report of January 1983, Agency of Studies and Research, Ministry of Reconstruction.

2. To develop a housing program to provide the suitable housing type to the reasonable costs with appropriate financing of different kinds.

- 3. To prepare a Land Management Plan including re-buying or redistributing the land.
- 4. Instead of setting plot options geographically; there is a need for establishing a criterion for a waiting list that includes people working in the new town. This calls for continuous changes in physical plans followed by land division close to actual development.
- 5. To charge land prices reflecting actual costs for provision of services; to provide subsidies only to the lowest income household in the form of lease holds with tenure and, initially, lower fees, to introduce a land financing system.
- 6. To create a special saving bank and other financial instruments for the low income groups.
- 7. To concentrate and coordinate development, area by area, neighborhood by neighborhood, community by community, instead of developing separate areas at the same time.
- 8. To guide the construction of roads and utilities according to growth plans. This is to be reflected on the design of roads and public utility networks.
- 9. To increase, wherever possible, densities and total plot areas for residential purposes, thereby decreasing per capital costs in roads, utilities and community facilities
- 10. To stimulate housing construction with small-scale contractors and utilize the informal sector.
- 11. To establish a building materials storehouse; provide technical assistance for the design, contracting and construction of housing.
- 12. To prepare a complete services program.

- 13. To extend housing and employment information services.
- 14. To improve cost recovery by estimating water and power charges reflecting costs.
- 15. To strengthen cost recovery by a market oriented management of development for industrial and commercial activities.
- 16. To develop public services closely related to actual population increase and its composition.
- 17. To encourage the development of small-scale commercial services in the city by extending household system to small-scale business.
- 18. To introduce a local public transport system which can be extended on demand? The regional transport system should be improved as well.
- 19. To establish service training program for the management and technical staff.
- 20. To prepare procedural manuals to improve management performance.
- 21. To establish a proper filing system for correspondence, reports, maps and contracts.
- 22. To establish a proper information center with an exhibition of models, maps and films.

## 4.1.3. The Approach to the Structure o/the Development Process

It should be clear that there is a clear difference between the planning process and the development process. The planning process begins with the decision for building a new town is taken and ends with the approval of the plan. While the development process starts when the decision for implementation is taken and continues until the new town becomes a stable reality. In many cases the

Planning process continues with its operational character in the development process in order to meet the unexpected modification due to any economic, social or political decisions changes. The planning process is based on the pragmatic approach, while the development process is guided by the management capabilities. The previously prepared plans are basically to provide the physical framework for the development of the new town in more details, where the economic and social framework cannot be determined for long periods at a time. Planning can be a onetime event, only when the goals are simple and the outcomes are easily predictable. However, when the goals are complex and the preconditions for decision-making are constantly changing (taking the development of a well balanced new town as an example) a onetime effort cannot be sufficient.

Master plans are usually based on unreliable or old information. They are also based-in many cases- on physical targets set by the authorities, which with time prove to be unrealistic. The constraints to development may be stronger than expected. Furthermore, these plans are more concerned with the characteristics of the product than the process of implementation to achieve the product.

Planning so far has also been based on the view that the first stage of the new town can be viewed as one single- entity. Experience has proved this view mistaken. Consequently, this view has to be changed and it is necessary that a new development system be introduced, based on previously prepared plans in order to meet the changing conditions of development.

The purpose of the development process is to make a possible coordination growth of the different sectors of the new town, thereby minimizing the costs of budget and inappropriate construction standards. It is meant to facilitate the development in relatively small, incremental steps. The development process should ensure that decisions concerning the new town development be based on the actual expected inflow of population taking into account the various constraints Affecting the growth.

The desired rapidity of the growth will thus be a function of certain factors influencing the growth, in particular the development of employment opportunities. The development process is based on an annually repeated process to arrive at a medium-term (5 years) development plans and one year investment operation plans which form the basis for the budgeting.

The main employment opportunities in the new town are the industrial development. The increase in industrial employment implies a similar increase in other economic activities and employment in other sector, construction and in different types of public and commercial services.

The development process requires the preparation of population forecast. This could be done with the help of employment forecast and the demographic characteristics of households, in particular with regard to household sizes and activity rates. In this case, natural population increase and migration should be taken into account. The account should include the population expected to work and live in the new town, residents to commute to other areas, and residents from other areas who commute the new town.

The population forecast should be prepared annually showing the distribution of population by age, sex and geographical area. The population document will be used as a common guideline for all parts of the new town operation. The preparation of sectorial construction programs and the replanning of operation and maintenance of community functions are based on the preconditions determined in the population forecast. Sectorally integrated development in selectively small incremented steps could be greatly facilitated. The implementation standards to be used by the sectorally responsible branches of the new town should be clearly stated in the guideline which will be considered as a development manual. The details should be decided as part of the implementation process.

The structure of the development process should cope with the changing preconditions, the improved information and the experience gained. It should serve to facilitate a flexible planning adopted to actual growth. The plans should be translated to projects with estimated annual budget for the coming fiscal years and within the time span of the five years National Plan. Sectorial development plans should follow the preparation of the common guidelines, as integral part of the budgeting process. This should cover both capital investments, operating costs and revenues for all sectors under the responsibility of the authority of the new town.

Development plans with a longer time perspective are to be prepared in order to satisfy possible growth and changes in the future. The major part of the development process will cover the planning, budgeting as well as execution and monitoring activities. These activities in practice will involve the major part of the staff in all departments in the authority of the new town.

The structure of the development process should cover all activities in an integral and coordinated manner. Predicated annual program for all activities should be reviewed every year against the actual execution of projects on the one hand and the increase in the number of new settlers on the other. With more information gathered during this year it is possible to evaluate the situation and adjust the progress plans accordingly in order to bring the development process to equilibrium. In this case it is important to define specifically who is going to do what and when for all departments in the new town authority. This will be the base for developing the administrative structure and not the way round.

# 4.1.4 The Functions of the Development Authority of New Towns

The Development authority of the new town should deal with the following main functions (Fig. 4.2).

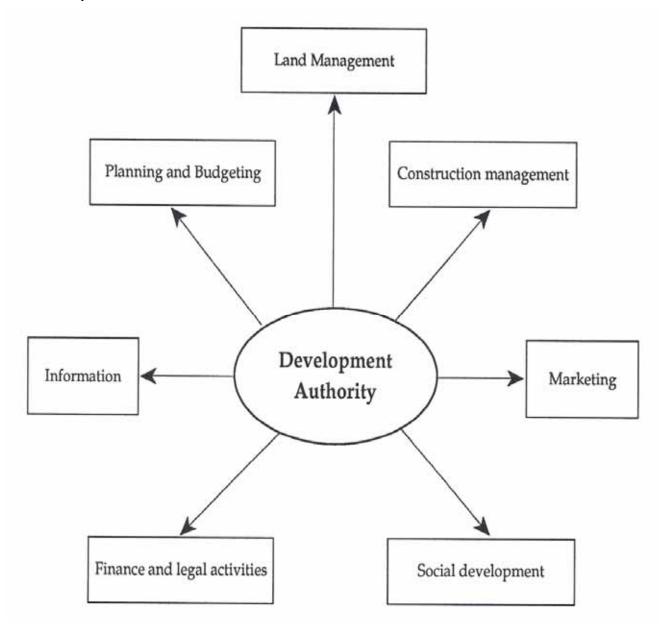


Fig. 4.2: The functions of the development authority of new towns

### 1. Planning and Budgeting

This function should be treated in relation with a coherent system including annual and periodical qualified targets and a monitoring system of the MBO (management by objectives). Quantity time schedules and measurements of achievements should be used for planning and follow-up. A standardized monitoring document, consisting of the plans and related achievements has to be established.

#### 2. Information

Information gathering and processing should be established with a high level of efficiency. A computer program is necessary in this case. The information system is a core function in the management organization. The information system covers the different areas of development activities such as housing, commerce and services. In the case of industry the information should include the number of workers, water consumption, number of establishments in production, under construction or having received land...etc. All data should be easily available on a tabulated basis. The information of different development activities should be updated periodically, analyzed, stored and retreaved when required for better monitoring of population situation, for forecasting and other purposes. Management needs information at its fingertips about all the important areas of activities.

### 3. Marketing

There is a continuous necessity to market the new town to those categories of institutions and individuals which the new town needs to attract in order to be able to achieve the intended growth and diversity. The public relations section in the management organization should perform its functions with great marketing awareness. Updated services and facilities etc..., should be provided for investors, landowners and migrants. A proper active program for attracting activities is necessary for the promotion of housing, industrial and other projects. The valid information should be well developed. This is the show window of the new town.

### 4. Construction Management

A contracting procedure has to be well performed, established and consequently project management system should be established in order to avoid money losses and enhance the development process.

#### 5. Finance and Legal Activities

A well organized financial system has to be established. A computerized model is of priority need for effective management. The same concept applies to legal activities which enhance the relationship between dealers, customers, investors, individuals and institutions on the one hand and the administration on the other.

#### 6. Land Management

Land provision should be related to actual demand, as far as possible, providing plots in step by step coping with the actual needs of employees, and implying a system of plot sales closely coordinated with the development schedule. A flexible land management system should be established to allow householders to obtain plots at an appropriate time and at affordable costs. This means that plots should not be committed in advance for a long time. Land management should try to prevent speculation as far as possible. It should allow economically sound cost recovery, possible subsides should be directed to the householders with the lowest income. It is recommended that the options for plot should not be associated with their geographical location. This requires that options are declared valid in principle, but without their identification, with regard to a given plot in current parcellation plans. The parcellation of residential blocks should be carried out in direct connection with the actual construction priorities in order to cope with the actual demand for plots. This means that the assignment of plots will be done in areas expected to be developed soon, i.e., within one or two years.

Land parcellation may be performed, block by block, in direct connection with the signing of contracts with the developers. Thereby it will be possible to ensure that plots will actually be developed, and they are suited to the requirements of the developers. This means that parceling shall be undertaken shortly before development and not far in advance.

It was recommended that the land management for the new town of Tenth of Ramadan should include the following points. (2)

- 1. Plot optioners by type should be asked to develop their plots within a fixed order.
- 2. Plot distribution should follow the time requested by different developers.
- 3. Increasing development rate area-by-area.
- 4. Balancing development in additional phases as required for the city.
- 5. Enabling a more concentrated development in area-by-area.
- 6. Increasing densities.
- 7. Decreasing per capital costs.
- 8. Availability of plots required sizes and types.
- 9. Better usage of public facilities.
- 10. Lower public transport costs.
- 11. Reducing maintenance costs.
- 12. Reducing public area investments.

#### 7. Social Development

It should be clear, nowadays, that urban development of new towns does end by building roads, services network, housing, factories, schools...etc. In developing countries urban development is coupled by the process of social development in order to keep the balance between the two areas of development. Special care in the management organization should be given to the upgrading of the social life of the population. This might require direct instruction to the new resettlers, training and orientation courses, community participation in the management process, enhancing women activities and Encouraging youth activities in the fields of social services besides other activities.

<sup>2.</sup> Ref: SWECO, <u>Tenth of Ramadan. New Industrial City. "Growth plan 1982".</u> Advisory services for implementation and management assistance. Final report of January 1983, Agency of Studies and Research, Ministry of Reconstruction, p.8t.

The school, the hospital, the theater, the public arena and above all the mosque should be utilized to serve these purposes.

# **4.1.5** The Core Town Concept and the Management of the Development Process

The experience gained from the development of new towns has proved that the conventional master plans were not easily managed. In most cases the implementation of master plans was managed as a series of construction projects and not as a development process. In the case of new towns in Egypt, the follow-up of the implementation process has proved the following facts:

- 1. In spite of the huge amount of investments spent in the new town it is clear that there is a wide gap between the actual achievements and the planned targets specially in the rate of housing new resettlers.
- 2. The conventional physical planning concept applied has proved to be unable to achieve the objectives of the national urban strategies specially in attracting more resettlers to the new towns, with the limited resources and the basic needs required for the resettlers.
- 3. The limitation of manager capabilities which can deal with the continuous development process with its economic, social and physical implications. This is beside the limitation of proper information, financial capabilities and the appropriate building technology.
- 4. The development of old towns including the informal settlements was always a communal achievement, contrary to the case in the new towns where the resettlers have no role in the development process.

From the above facts it become necessary to review the present planning policies, concepts, programs and above all the managerial concept of new towns.

The new development concept can be, therefore, drawn out from the experience of the development of old towns and informal settlements as a communal achievement. The core town concept can be the appropriate approach to the development of new towns taking into consideration the proper management of the following aspects:

- 1. The community participation in the development process.
- 2. The establishment of proper base for an appropriate building industry, as a local public utility.
- 3. The integration of social development of resettlers with the physical development process.
- 4. The continuous balance between the number of re settlers, public utilities, public services and job opportunities.
- 5. The attraction of resettlers by all means and information media.
- 6. The provision of high quality services, without any differentiation between the resettlers income.
- 7. The establishment of a local architectural character to the urban environment.

In this concern it is appropriate to refer to distinguished planners who refer to the concept of the core town. The first is Christopher Alexander who referred to the issue of the preference of architects and planners to the old towns contrary to their consideration to the new towns as a hierarchical structure of separate urban units which he referred to as "a tree thought". Christopher Alexander considered the town as a complicated structure involving a great number of activities and events which is composed of a network of constant and variable factors. He considered the new towns as artificial settlements contrary to the old natural towns which were built without planners. The conventional new town concept was considered as a prototype idea, transferred to all over the world including Egypt. This is why the local development concept should be based on the experience of old towns as a natural development process.

The Spanish Planner Rovina (1856) considered the town as a composite of several historical periods each has its social, economic and physical characteristics. (3) Rovina in his Barcelona plan respected the old town as a core to the future expansion of the city. The natural growth therefore becomes the main basis for the core town concept, which needs continuous management to control the balanced growth of the new town. Others consider the urban development process as a communal achievement and not an individual planner's action. This means that the new town plan should be adopted and guided by the community and not adopted as guidance to the community. The role of the planner in this case is more restricted to the management of the natural development process as a series of incremental growth reflecting the continuous socio-economic and housing needs and requirements of the community.

The management of the development process of Heliopolis new town (1910) north-east of Cairo could be taken as an advanced example of the core town concept specially in terms of promotion and marketing through a series of recreational and cultural activities which attracted the first re settlers to the new town. The new town was given a distinguished architectural character which was adopted through local building rules and regulations.

The natural growth of the informal settlements is another expression of the capabilities of the inhabitants to provide themselves with housing, utilities and services without the interference of the state. This factor should be taken as a major criterion in the management structure of new towns which is referred to as the management of community participation in the development process.

<sup>3.</sup> Mohamed El Kateab, <u>Urban Cores- An approach to evaluate the resettlement experience in Egypt</u>, Conference on: toward defining a national and regional strategy of urban development in the Arab World, 15-18 December 1990-Cairo(in Arabic)

# 4.2. The Relation Between Organization and Administration Aspects and the Urban Planning

# **4.2.1. The Administration and Organization Aspects Follows the Urban Planning**

The organizational structure for managing urban development is defined in the light of the technique and method of the urban planning of the new town. It is shown from practicing the management of new towns that the urban planning is always prepared before building the organizational structure of the new town development authority. Urban planning usually takes a long time in its preparation depending upon different economic, social and physical factors which are determined in the light of regional or national policy of urban development. Urban planning is presented in the form of reports that define the goals of the planning, the method and technique to be followed to achieve these goals, and the results to be reached by planning. Finally, the planning alternatives are presented to be evaluated for selecting the appropriate one as a general plan having its dimensions, phases and economics. The general plan is, then, elaborated to a detailed plan having a number of urban projects, executive phases and organization procedures to achieve the planning goals. (4)

Thus, urban planning is presented as a fixed plan, with its defined details. The authorities which assumed to be organized afterwards have to be committed to realize this fixed plan. This authority (New Town Development Authority) has to achieve the urban planning, executing its projects, receiving and setting the new settlers, revising the reports and documents, giving the building permits, and following-up the executive works of roads networks, facilities and public services. Here, the administrative relationship begins with the other sectors which deal with the infrastructure works, as these works are carried out by other executive Authorities which work on the regional or national level.

<sup>4.</sup> Hamid Shirvani, <u>The Urban Process</u>, Van No strand Reinhold Company, 1985, P: 110.

The New Town Development Authority (NTDA) has also to have administration dealings with the new factories owners, new shops owners, the public housing companies and the private housing companies. Moreover, it has to deal with the investors needs in the new towns and with the authorities and organizations financing the various projects, whether they are financed by the State or by investment organization or by cooperative societies. The NTDA deals with all these within a framework of a number of regulations and laws directing its work and defining its policy. So, in the light of these activities and assignments, and within the frame of regulations and laws directing the administrative and financial work, the organizational structure of the NTDA is defined.

The assignments of the administrative and organizational structure of the NTDA vary according to the new town regional location. The administrative assignments of the NTDA which are regionally linked with existing residential areas, near the new town, extend to include regional relations concerned with roads network, regional infrastructure, energy resources, trade, industry, agriculture and resettlement activities. In this case, the new town (as in England and France) will have mutual and integrated interests with the interests of the near-by settlements, whether they are connected physically with the new town or not. This means that there are administrative procedures and functional relations defining the relation between the NTDA departments and the corresponding departments in the capital of the region or in the residential areas located near the new town. Therefore, there is an organizational and administrative correlation between the NTDA and the existing authorities in the residential areas near the new town. This condition will facilitate the easy transfer of the administrative system of the NTDA to the local authority system of the State which will manage the new town after its completion physically, socially and economically. This will not be the case for the new towns located far from existing residential areas and separated by wide areas of unused Land, as in Tenth of Ramadan new town which was the subject of the detailed study of this thesis.

However, in the case of new towns located in the mid of desert, their administrative and organizational structure faces a number of factors that affect its performance. At the beginning of the new town development the NTDA performs as a project administration, where its department concentrates its work on assisting and following up the infrastructure projects till the stage of the early industrial or services or human settlement. Then, the responsibilities of the NTDA grows to meet the changing factors that appear during the new town growth. Its responsibilities are modified to cope with the new requirements of the factories when they start production, of the services when they start functioning and of the rapid increase of settlers. In this case, the NTDA may distribute its responsibilities between enhancing and following-up the industrial settlement and the enhancing and following-up the services settlement which copes with the settlers growth rate. The settlers growth rate may vary from the industrial growth rate. Therefore, the urban development policy of the new town will vary from achieving the economical goals, or the re settlers goals, or the balance between them continuously.

Furthermore, the administrative nature of the NTDA differs according to its administrative subjection whether to the Authority of New Urban Communities which follows the Ministry of Reconstructure, New Communities, Housing and Utilities and which works by the traditional administrative way prevailing in the governmental departments, or its subjection to private organization which works by the investment style and is committed to achieve special goals. The latter style is known by "Management By Objectives". These private organizations work through flexible and changeable administrative and financial methods, contrary to the prevailing governmental methods. This matter is reflected on the performance efficiency level of the NTDA in both cases. The efficiency of performance is associated with the availability of proper expertise appropriate to the requirements of work in the NTDA. This expertise has special qualifications and is not available in the existing governmental organizations which provide the NTDA with the necessary staff for its

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technical, administrative or financial affairs. Thus, re-training the staff is considered an important factor in improving the organization and administration performance level of the NTDA.

The fact that the new towns are located far from the existing residential areas affects the stability of the NTDA staff in their positions. This is due to the lack of public services and utilities especially in the first phases of development of the new town. Consequently, this is reflected on the inefficiency of the staff performance. Whereas in the case of the new towns being located near the existing residential areas, the NTDA staff are more stable in their positions because of the availability of public services and utilities near the new town. This increases the efficiency of the staff performance.

Therefore, this is one of the reasons of the difference between the performance efficiency of the NTDA in England, where the new towns are located near residential areas, and Egypt, where the new towns are located far from the residential areas. The NTDA in England has, in addition, documented past experience and facilities which enhance the performance of their staff, mainly the administrative manuals.

# 4.2.2. The Administration and Organization Aspects as an Element of the Development Operation.

The concept of the urban planning is not any more seen as a static process undertaken by the NTDA, having its fixed rules and detailed planning, but it is now considered a continuous operation. The NTDA can deal and interact, through this continuous operation, with the changing political, economical and social factors that face the development of the new town.

This is why the term urban planning is changed into development operation because it deals with unexpected and changing factors. (5)

The organization and administrative structure of the NTDA has to be modified to cope with the nature of the development operation. The planning concept of the development operation aims at setting the design of the new town development as a continuous process rather than setting a well-defined

static urban planning with its stages, details and regulations. Therefore, the organization and administration structure of the NTDA is considered one of the elements of the development operation which is changed and modified according to the changing requirements of the development operation of the new town.

The new town development is not seen in the new planning concept as a mere urban development but it is considered as an urban, social and economical development at the same time. The environmental, social and economic studies which are undertaken in the conventional urban planning aim at setting the land use of the new town in its different phases, besides defining the expected social and economical characteristics of the new town.(6) Whereas these studies in the new planning concepts, the development operation, aim at defining the goals and objectives to be realized in the new town, then setting the plans that cope with these goals for each phase. These objectives can be the search for new field of production appropriate to the available local conditions, the increase of job opportunities for the settlers and the upgrade of their social, cultural and living standards in the new town. The settlers are first received, settled and then prepared and ready for their participation in the physical, social and economical development operation. The settlers of the new town are the core of the Development operation and its first beneficiaries.

Therefore, urban projects have to be dealt with within the frame of the socio-economic development, as a continuous process.

The administration and organization structure of the NTDA is considered one of the main elements of the development operation. Special attention has to be paid to this aspect as to guarantee its smooth and efficiency performance. Certain care is to be taken in setting the administrative structure of the NTDA with all its sections, assignments and qualifications.

<sup>5.</sup> Michael Mattingly, <u>From Town Planning: to Development Planning A</u>
<u>Transition Through Training:</u>, Habitat Intl. Vol.12, No.2, 1988, p: 99.

<sup>6.</sup> Hamid Shirvani, <u>The Urban Process</u>, Van No strand Reinhold Company, 1985, P: 5.

These assignments are defined in the light of the practical requirements of the development operation, and they are set as administrative procedures defining the nature of each administrative operation and the appropriate staff qualifications required to undertaken it. These qualifications can be available in the NTDA or, if not available, they will need special training. So physical plans have to be drawn according to the available organization and administrative potentialities, in order to relate the planning thought, as a theory, with the actual practice. This means that the planning concept has to be related with the organization and administration concept of the development operation.

The planning concept has to be flexible in order to allow alternatives and to b-e modified according to the economical, social and physical prevailing conditions. However, it has to respect the main general objectives and standards which control the development operation of the new town. The flexibility in planning goes parallel with the flexibility in the administration and the ability of decision making. This cannot be achieved in the administrative systems applied in the government departments. However, this can be achieved within the frame of private companies or organizations.

The management of the new town, in the development operation, has to be based on sufficient information and data (Data Bank) which includes not only the environmental, urban, social and economic project information but also Information about the settlers.

The Data Bank has to be based on a computer system which records all the data and information about each element of the development operation. The settlers are considered the most important element. Each settler should have his own computer file which included his income, saving abilities, living requirements and the rent of his house or the location and area of the housing plot he owns. Moreover, his file determines all the administrative procedures with which he dealt since his arrival to the new town. These include finance, rent, and ownership and service consumptions.

To upgrade the administrative and organization of the development operation requires the upgrading of the social and cultural standards of the settlers. The fact which will facilitate their communication and interaction with the advanced administration in urban, economic and social development activities throughout the different phases of the development of the new town.

On the other hand it is necessary to upgrade the performance efficiency of the different departments of the NTDA beginning by improving the administration procedures with the settlers till organizing the staff offices of the NTDA. The performance efficiency is supported by administrative manuals which define all the proceeding phases undertaken between the different departments in the NTDA or between these departments and the settlers. This is considered one of the incentives which attract the settlers to the new town.

The development operation of the new towns requires establishing local building centers which operate through self-help efforts. These centers supply the building and construction operations with all its requirements from labour, building materials and construction equipments. These centers have their own appropriate administrative and organizational structure. They have to operate in coordination and cooperation with the NTDA. The local building centers consist of different sections performing various jobs: supplying precast building structures, building Materials, construction equipments, trained labour for building or installing or maintaining the buildings, besides training sections which provide training modules for the new untrained labour or for the settlers, and also the marketing section to distribute their extra products. These centers are considered one of the main elements of the economic development of the new town because they provide job opportunities for the settlers to work and invest their money. Settlers participation in the building centers can be achieved through different means of self-help.

The difference between the conventional urban planning concept and the new concept of development operation for new towns is stated in the following comparison. (7)

#### **Urban Planning**

- 1. Urban planning is always prepared before building the organization and administration structure of the NTDA
- 2. It is a static process having its fixed roles and detailed planning.
- It is based on great amount of statistic data, social and economic studies defming the expected urban condition of the new town after a certain period of time
- 4. It is presented in the form of well defined master plan, detailed plan and planning studies report, for the final shape of the new town.
- 5. The new town development is seen as a mere urban development.
- 6. The environmental, social and economic planning studies aim at setting the land use of the new town in its different phases, besides defining the expected social and economical characteristics of the new town.
- 7. There is no need for data bank during the development phases.
- 8. The NTDA is considered as an executive agency.
- 9. The NTDA has to execute the master plan, along its different phases, as it is without making great changes.
- 10 The NTDA is administer subjected to 10. the traditional governmental rules and routine.

#### **Development Operation**

- 1. The organization and administration structure of the NTDA is an element of the development operation.
- 2. His continuous action controlled and guided by main objectives and policies to be accomplished.
- 3. It deals with the prevailing conditions and is modified according to the changing and unexpected factors facing it.
- 4. It is presented in the form of core town with the main objectives and policies which control it as a continuous action.
- 5. The new town development is seen as an urban, social and economic development at the same time.
- 6. These planning studies aim at defining the goals and policies to be realized in the new town, then setting the plans that cope with these goals for each development phase.
- 7. There is a need for a data bank during the development phases.
- 8. The NTDA is considered as a land developer and a consultant
- 9. The NTDA adopts and modifies the new town planning to cope with the changing and 1Dlexpected factors that face the development operation.
- 10. The NTDA is a semi private, joint stock Company committed to achieve special goals "Management by Objectives".

<sup>7.</sup> Anthony J. Catanese and James C.Snyder, <u>Introduction to Urban Planning</u>, McGraw-HiII Book Company, 1979, p: 188.

11. The organization structure of the 11 The NTDA is a fixed structure.

- 12 Expertise with special qualification 12. Expertise needed in the NTDA staff needed in the NTDA staff are not available in the existing governmental organizations.
- 13. The NTDA cannot deal and interact 13 with the changing political, economical and social factors facing the new town development.
- 14 The assignments of the departments and the qualifications of its staff are defined in the planning studies, without any consideration to the reality.
- 15. There is no flexibility in planning or in 15 the management.
- 16. The administrative procedure in the 16 NTDA is defined by the central governmental authorities in a static manner, without special consideration to the requirements of the new town development.
- 17 Most of the decision making process, 17. Most of the decision making process is concerning the new town development, is undertaken by the central authorities.
- 18. The role of the planner is just to set the 18 master plans and the detailed plans for the new town along its different phases.
- 19. Executing the urban plans is done 19 through implementing large projects by big contractors.
- 20. Phasing the new town development is 20 done through implementing a complete neighborhood and sectors one after the other according to the fixed master plan previously prepared.

- organization structure NTDA is flexible and changeable according to the changing factors facing it.
- will be available in the private sector
- The NTDA can deal and interact with the changing political, economical and social factors facing the new town development.
- NTDA 14. The assignments of the NTDA departments and the qualification of its staff are defined and modified according to the practical requirements of the development operation.
  - The flexibility in planning goes parallel with the flexibility in the management and the ability of decision making.
  - The administrative procedures in the NTDA are done through administrative manuals which defined all the proceeding steps undertaken between its different departments or between these departments and the settlers.
  - 1Dldertaken by the NTDA on the local level.
  - The planners are responsible for setting and modifying the new town plans continuously during its different phases. This requires their availability in the NTDA all the time.
  - Executing urban plans is done through local and small contractors besides participation settlers in implementation process. This requires using appropriate building materials and equipments supplied by the Local Building Center.
  - Phasing the new town development is done through the organic growth of the core town, continuously, according to the actual requirements of the settlers.

21. Infrastructure and services buildings are implemented in its complete form to serve the settlers expected to settle after a certain period of time.

21 Infrastructure and services buildings are implemented through phases coping with the increase of settlers

# 4.3. The New Concept of the Development Operation of New Towns

# 4.3.1. The Need for a New Concept in Preparing the Development Plans

Urban plans of the new towns in Egypt, in the conventional concept, are prepared through different stages: starting by collecting data of the various elements of the plans, analyzing them, putting the planning policies, defining the planning alternatives and evaluating them to select the appropriate ones. The selected ones are developed and elaborated till they reach their final shape, the master plan, which will be approved by the concerned authorities. This master plan is transferred into a number of planning phases and the detailed plan is set for the areas of first priority. Through this process the integration of social, economic and environmental studies has to be taken into consideration. The planning studies are submitted in the form of reports besides the complementary urban plans.

Most of the time, the planning reports state the organization and administration structure of the authority which will transfer this master plan into reality in the form of investment projects. These planning projects are set in the frame of the five year plans of the socio-economic development programs of the state. Moreover, the planning reports define the different stages of the urban development and the building rules and regulations for the different land use and the estimated economic cost for implementing the different phases of the plans.

These planning studies end by their submission to the officials in the urban planning authorities and are suspended till the technical staff is completed, who will transfer the planning thought from the theoretical field to reality.

Master plans are implemented through production and services sectorial investments which are allocated for executing the different elements of the plans. The fact which will require a special coordination system between these sectors and the central authority for social and economic planning. However, this coordination is difficult to be reached because urban planning authorities, which follow the housing or the reconstruction sectors, have no power to force the other production and services sectors to be committed to execute the different planning elements. Therefore, the urban plans are scattered, in practice, especially because they are not implemented within the five year plans of the social and economic development programs which are undertaken by the central planning authority. Hence urban planning loses its socio-economic potentialities and in the same way, the social and economic plans lose their urban potentialities. Consequently, the planning within its urban, social and economic aspects suffers from the lack of coordination among them. This affects the realization of development process and objective.

The concept of the master plan did not achieve most of its objectives in reality because of the changing and unpredicted social, economic and political factors that face the execution of the master plan. Therefore, the conventional concepts have been developed to cope with the practical condition and the concept of the master plan was replaced by the concept of the structural plan. The structural plan aims at providing more flexibility in facing the changing conditions which affect the urban development policies. This is achieved within the predefined general lines which control its future perspective. However, through practice the concept of structure planning could not cope well with the frequent changes which face the development process. The fact which requires the search for a new realistic concept which can deal with the continuous planning variables, without changing the main objectives of urban development.

It is worth mentioning that there are two main trends in preparing the planning studies of the new towns:

*The first one* depends on the economic analysis of the development potentialities of the new town. The social structure required for this

development can accordingly be defined. Therefore, the urban environment which provides accommodation, services and infrastructure for this social structure can be defined. Thus, in this trend the social and economic development is considered the base for setting the urban development of the new town

The second trend depends on environment analysis of the urban development potentialities. This is achieved by defining different urban zones with different land uses connected together by road networks. This is realized through planning criterion which defines the areas of the different elements in the new town. These areas include: residential areas with its subdivision into districts and neighborhoods, each with its special density, besides zones for recreation, services, commerce, industry and education. In this case social studies are confined to consider the economic potentialities and, also, the social structures expected to settle in the different phases of the new town development. Thus, in this trend urban planning is considered the base for setting the socioeconomic and urban development of the new town.

It is now clear that there is a need for a new urban development concept which can deal with the urban, economic and social aspects of the new town development continuously over the different phases. This comprehensive development requires a well established and flexible administration and organization system which can deal with the changing and unexpected conditions that face the new town development.

### **4.3.2.** The Objective of the Dynamic Development Operation

Dealing with new urban towns is not limited to its physical aspect, the static element, which includes the buildings, services, infrastructure and roads. But it has to extend to deal with the settlers who are considered the dynamic element. In this way, the economic, social and cultural aspects of the community are integrated with the technical aspects of the development operation which deals with the new town as a continuous operation.

This operation has its administrational and organizational structure which can cope with the growth and development of the different aspects of the new town during its short, medium and long term.

The concept of development operation is applied to reality through the development authorities which deal with the urban development as a continuous operation. This means that applying the development operation to reality is done through its organizational and administrational aspects which deal continuously with its technical and executive aspects. Therefore, the concept of development operation becomes a methodology, including the organization and administration aspects, rather than preparing fixed master plans for the new town with its defined phases.

Urban planning projects for the new town in Egypt are still restricted to preparing the general master plan and detailed plans depending on a great amount of statistics data, environmental, social and economic studies. These plans are presented in the way of reports and drawings defining, in a static form, the expected urban condition of the new town after a certain period of time. However, the development operation is a continuous dynamic action which acts within the frame of the social, economic and political variables which face the new town development. Therefore, the fixed master plan and the planning reports become in appropriated with the dynamic nature of the new town. The fact which requires the search for a new concept for managing the urban development as a continuous operation. This new concept has to be capable of transferring the planning theory into practice on the different national, regional and local levels through projects with its defined investments, size and executing programs.

It is necessary, also, to look for a new concept which could deal with the urban development as a continuous operation having its own organizational, administrative, financial and executive dimensions.

In this way, the new concept would deal with the economic and financial planning authorities. A suitable method is required for the integration of the social and economic planning with the urban planning through the framework of the comprehensive development operation and the national urban strategy. So, preparing urban plans is not so important as transferring these plans into executive projects with their investment dimension through annual budget or the five year plans. The coordination between the different planning authorities on the different levels becomes an important element for the development operation of the new towns. This development operation is illustrated in the form of a long, medium and short term projects executed on the national, regional or local levels, through a well established coordination and management system.

Managing the development operation on the different planning levels requires an efficient coordination between the needs of the administrative and organizational development and the needs of the social, economic and urban development. This demands the modification of the administration and organization structure of the state, whether on its national, regional or local level to cope with the requirements of the dynamic concept of this development operation. Moreover, it requires determining the vertical relationship between the different planning levels and, also, determining the horizontal relationship between the different development sectors, services and production sectors. Besides, it requires improving the managing system of the development authorities on the national, regional and local levels in such a way that will achieve the vertical integration between the development operations on the previous levels and the horizontal integration of the sectorial development on its different areas (Fig. 4.3, 4.4, 4.5, and 4.6).

The organization and administration aspects of the social and economic development operation in its urban dimension are considered a vital matter in building the new town.

This is achieved only through unifying the data, standards And planning concepts to ensure the unity of economic, social and urban understanding.

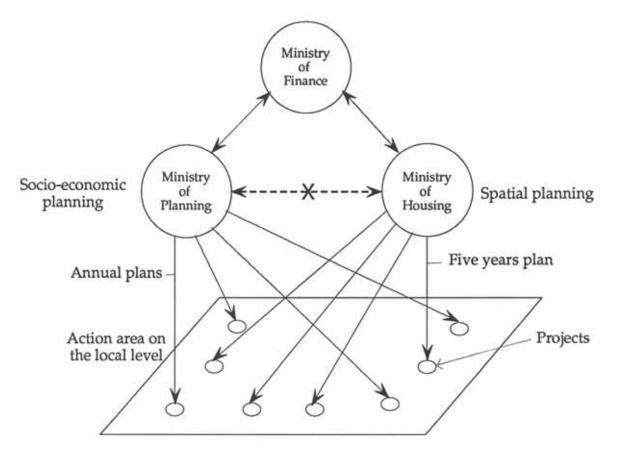


Fig. 4.3: The Existing planning System

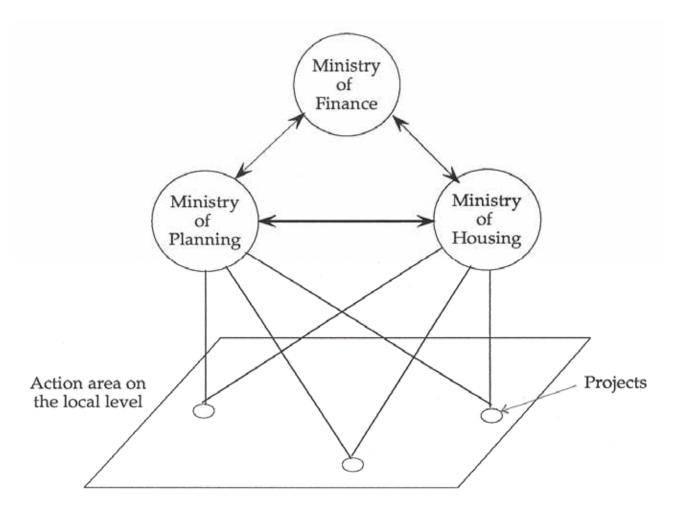


Fig. 4.4: A proposed planning system "Co-ordinated Approach"

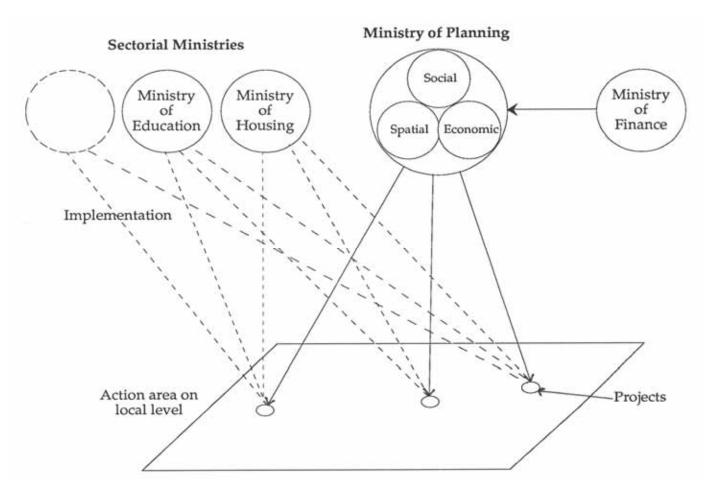


Fig. 4.5: A proposed planning system "Integrated Approach"

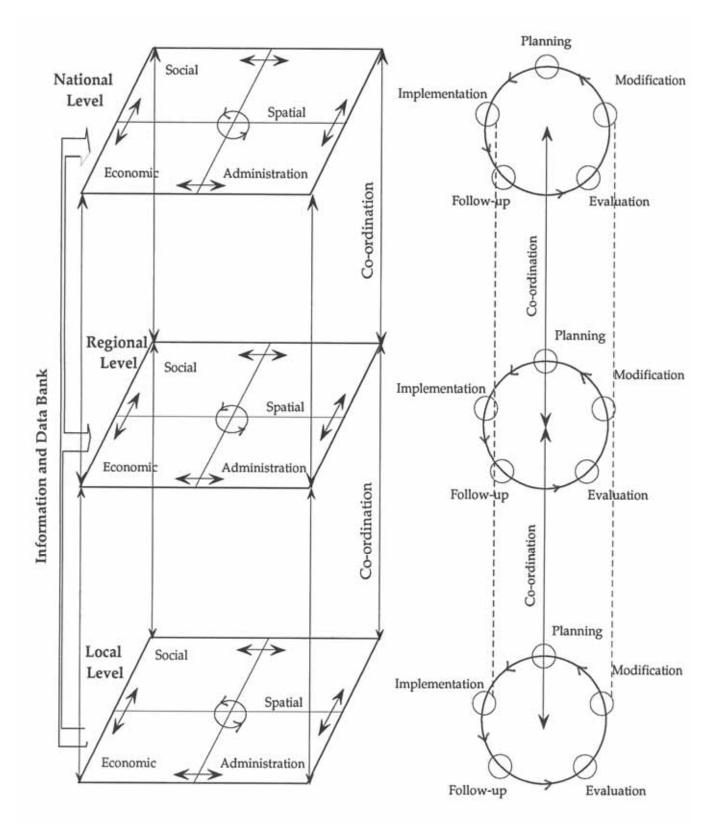


Fig. 4.6: The interaction between the different planning levels coping with the decision making operation

#### 4.3.3. Phasing the Development Operation

The phases of the new town development in the conventional concept are determined within the frame of a fixed master plan which defines the form of the new town after a long period of time. This matter has proved to be unrealistic from the practical point of view. Defining and drawing a rigid form of the new town after a certain period of time do not agree with its natural growth. The new town is not considered as a solid model of building, services and infrastructure but it is considered a living organism with settlers having their different living requirements which change with the change of their economic, social and cultural aspects.

It was clear from the traditional planning concept that the predictions of the future population increase rate, their living needs, their professional types and their social structure were unrealistic. These predictions are based on numerical measurements of the previous changes rates in the economic, social and cultural conditions, which differ from the present situation. Consequently these changing rates will be greatly different in the future. Therefore, the new concept of the development operation aims at dealing continuously with these changing and unexpected conditions. The fact that will require defining the form of the urban growth of the new town in a structural form, to guide and not to restrict its natural growth and to cope with the changing circumstances.

The concept of the development operation is not only applied to the urban structure of the new town, but it is also applied to its infrastructure projects. Thus, the new town grows in a natural way in coordination and balance with its components. This development operation affects the architectural aspect of the new town including services buildings such as: schools, clinics and commercial centers, and also housing units, whether separate or in groups. This aims at phasing the construction of these buildings to cope with the number of settlers utilizing them. The building of a school as a complete structure, as an example, to accommodate an expected number of students after ten years would not be

Economically appropriate, because during the next ten years only a part of the school will be used due to the scarce number of students. Hence, the lifetime of the school buildings will be shortened, needing extra maintenance which affects the building economy. Besides, the inoccupation of a part of the building is considered a frozen investment. The architectural design in the development operation has to cope with the phased growth of the new town requirements.

The construction of roads infrastructure network, in the conventional planning concepts, is implemented in phases according to the planning phases of the master plan. In the case of Tenth of Ramadan a great amount of money was invested in constructing the infrastructure of the first phase of development. By the end of 1989, eleven years from the beginning of implementing the new town, 72 millions Egyptian pounds where invested in constructing the water supply networks, 55 millions in constructing the sewage network and 55 millions in constructing the electricity network. (8) The total of 172 millions Egyptian pounds were invested in the construction of the infrastructure while the number of new settlers didn't exceed 13 000 inhabitants in the same period. The cost of infrastructure per settler = 13 000 LE which is considered a great amount of investment compared with the expected average of 2800 LE. (9) Most of these investments are not utilized because of the slow growth of the number of settlers expected in the master plan. More investments were spent not only in the first phase of development, but also in the latter phases in the future. This is why it is difficult to evaluate the per capita investment rate in infrastructure.

<sup>8.</sup> Ref. Ministry of Reconstruction, New Communities, Housing and Utilities, New Towns. Shining Marks on the Map of Egypt, December 1989, p: 52, (In Arabic).

<sup>9.</sup> Ref.: Talaat Demerdash Ibrahim, <u>Feasibility Study of new Towns building in Egypt(Doctorate Thesis)</u>, Faculty of Commerce, Zagazig University, 1990, p: 215, (In Arabic).

Phasing the construction of roads networks and infrastructure aims, in the development operation, at their appropriate utilization, without keeping part of them unused or not used in full capacity. This phasing has to cope with the settling phases, which requires a new concept in designing these networks. Investments are provided in stages in proportion with the number of settlers in each development phase. This matter goes within the development operation economics. Thus, the economic factor has a great impact on the development operation which requires a flexible system to face any changes or unexpected conditions, and according to the available investments. This may be achieved through using modular urban units or cells, which are located, arranged and increased, according to the development requirements, to form the urban fabric of the new town.

Phasing the construction of roads network, water supply, and sewage and electricity networks is applied in the development operation according to the following:

# **4.3.3.1.** Phasing the Construction of Roads in the Development Operation

Constructing roads networks in the conventional planning concept is done through defining the hierarchical classification of the types of roads whether they are main, secondary or local roads, and according to the studies which predict the capacity and traffic density of these roads in the future. Roads, similar to the case of infrastructure, are not utilized in its full capacity except in the final stage of the development of the new town, after its complete settlement.

In the development operation, the main roads are constructed in the beginning of the first phase of development by paving half of the road width, at the end of this phase it is coated with the initial coat of asphalt. The other half of the road is constructed when the traffic density increases on the first half, during the second phase of development.

Heavy means of transportation for the building and construction operations in the new town are excessively used in the first phase of the development operation.

This requires paving the roads without the final coat of asphalt which is to be accomplished at the beginning of the human settlement in the new town. This is done to minimize the investments and costs of maintaining these roads (Fig. 4.7).

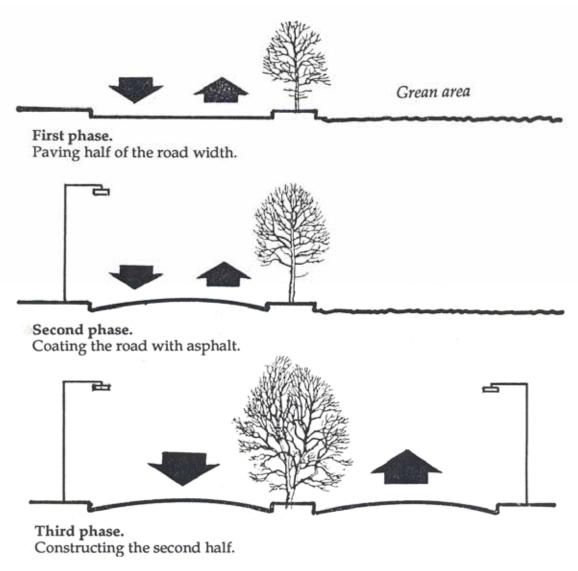


Fig. 4.7: Phasing the Construction of Main Roads

Roads, like other elements of the new town, are affected by many variables which cannot be realized during setting their plans. Roads are always attracting different human activities especially the commercial ones.

When the roads attract commercial activities, its efficiency decreases as well as its capacity. Therefore, the Development operation has to cope with this natural phenomenon by defining the function of the main axes of the neighborhood for vehicle traffic, in the first phase of development, until they become filled with services and commercial activities. Then the function of the main axes of car traffic is changed into a pedestrian, in the following phases of development, while the cars traffic is transferred to other parallel traffic axes, on both sides of the pedestrian (Fig. 4.8). The transition operation takes place according to the requirements of the new town development. Thus, the concept of development operation becomes a system of dealing continuously with the new town during its different phases of development,

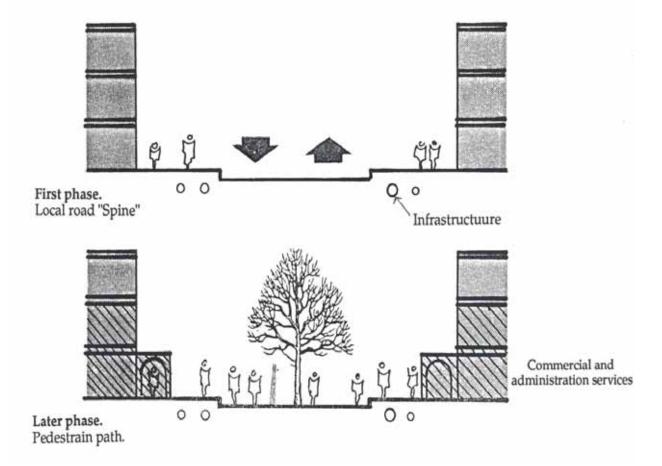


Fig. 4.8: The Function of the Main. Axes of Car Traffic is Changed into a Pedestrian.

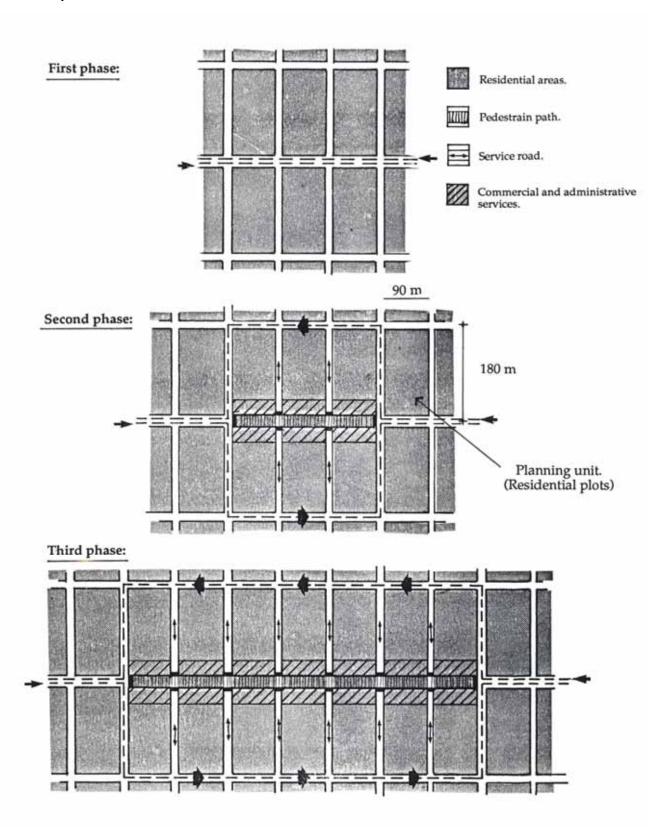


Fig. 4.9: The main local roads "Spine" is modified to be a pedes train path after being overloaded with traffic, shops and services.

# **4.3.3.2.** Phasing the Construction of Water Supply Network in the Development Operation

According to the conventional planning concept, providing new towns with drinking water is done through implementing complete water - supply network in the first phase of its development, including pumping and purification stations, high and ground tanks. The diameters of the drinking water pipes are designed to satisfy the needs of the new town of water in the future. This means that the design of the water supply network is defined according to the needs of the settlers expected to settle in the later phases of the new town development. This leads to freezing large amount of investments in the water supply network without reasonable profit in return, since such network will not be utilized with its full capacity except in the last phase of development. Moreover, implementing water pipes in unurbanized areas, or even in low population density areas, leads to the shortness of its lifetime, and thus, falling short of its efficient operation at the end of the new town development.

To avoid these problems, it is necessary to phase the construction of the water-supply network to cope with urban development operation. It is difficult to anticipate the future image of the new town development, particularly on the long run. It may grow as planned, or it may not. This is attributed to the many unexpected variables which have an impact on the development operation. In order to cope with phasing of the development operation, the implementation of public utilities may be done in accordance with the population growth of the new town, as to the following: (10) - (Fig. 4.10)

<sup>10.</sup> Ref. An Interview with Eng. Khalaf Abdel-Aal, Sanitation Consultant Engineer, at the center for Planning and Architecture Studies, 1991.

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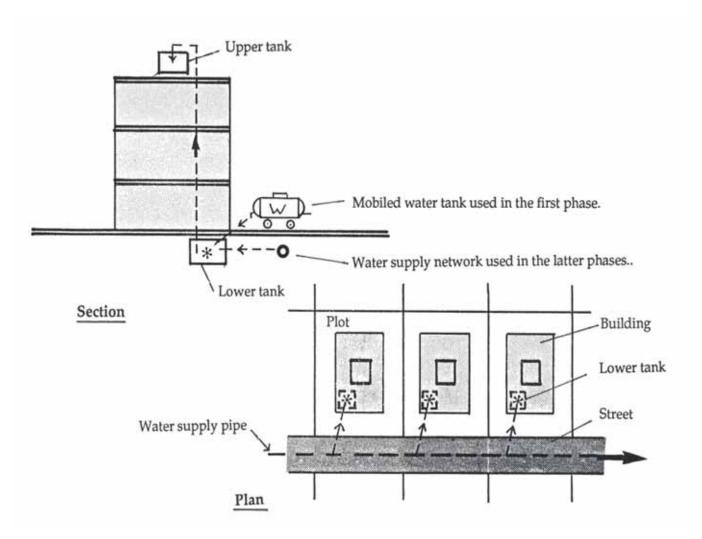


Fig. 4.10: Phasing the construction of water supply network

#### First Phase

The first phase of the development operation of new towns is characterized by scarcity of the settlers, being mostly masons (a temporary labour living in tents and temporary shelters). To supply those workers with drinking water, it is better to use the method of transporting the water by mobile water tanks, provided that their numbers do not exceed one thousand. This is determined according to transportation economics. The mobile water tanks are drawn by agriculture tractors since, at this phase of development, the roads are paved but not covered with asphalt. The capacity of these tanks is to be between 1 to 3 meters square.

The water source in this phase is either from a main water pipe, not farther than 15 Km from the site and has an outlet to pour water directly in the water tanks from above, or water may come from the wells if underground safe drinking water is available and near the surface of the ground, from 25 to 50 meters depth. This is defined according to the operation economics. In the case of using the wells as a water source, a ground reservoir is needed, having the following capacity:

Water consumption per day.

 $\therefore$  The capacity of the ground reservoir = daily water consumption = 150 m3.

The consumption of water per person in this phase of development is estimated around 150 liters / person / day, which is less than the normal rate. This is due to the fact that settlers economize water consumption. Water is transported by water tanks down by agricultural tractors to the houses, and every house should have a ground reservoir to receive water directly from the water tanks and an upper reservoir to store water for daily use. Water is lifted up by a manual pump since the electric pumps are not economic at this stage, due to difficulty of obtaining the electrical energy. The capacity of each of the ground and upper reservoir is 1 m3, and is made from galvanized steel or fiber glass, for easy cleaning and maintenance.

The average number of family members in the first phase is assumed to be 4 members, and the rate of water consumption is around 150 liters / person / day and the total population = 1000 persons, and the capacity of the mobile water tanks = 3m3 or 3000 liter.

The total number of individuals served by one transport of water tank = 300 liters = 20 individuals
 Liter / person / day
 Number of families served by one transport of the water tank = 20 magazing

- Number of families in the first phase =

- Number of water transport by tanks needed by 250 families =

With the availability of five water tanks and agriculture tractor ten water transports may be made per day. The number of water tanks may be increased according to the nature of work in the site and the distance of the water supply from the area. The advantages of using this method of water distribution are:

- 1. Easy to operate and maintain and does not need skilled labour.
- 2. There is no need for consuming electrical energy which is not available in the first phase.
- 3. Easy control of water distribution to the housing units.
- 4. The ground and upper reservoir in the housing units will be used during the next phases of the development operation, especially the upper reservoir when the water supply pipes are implemented.

5. The agricultural tractors and water tanks will be used after this phase in building and construction operations, or in land reclamation. Thus, there will be no lost or frozen assets in any investment in the future.

However, there are some disadvantages in using this method:

- a. The availability of water loss and consumption during the process of water transport and emptying.
- b. Water transported by tanks is unhygienic since water is exposed to pollution from many sources.
- c. The upper and ground reservoirs need continuous cleaning.
- d. Lack of continuity of the water supply and the many problems of water transport.
- e. This method is considered economic if it serves a number of settlers in the range of 500 and a maximum of 1000 settlers.

#### Second Phase

In the second phase of the development operation of the new town, where the number of settlers will reach 10.000, many alternatives to supply the housing units with drinking water are available. Such alternatives vary basically according to the type and distance of the drinking water supply. This phase is characterized by an increased number of settlers and the availability of paved roads, covered with asphalt. The settler consumption of water is estimated to be 150 liter/person/day.

The following are the alternative methods to supply drinking water to the housing units:

## A) First Alternative

In case of the availability of pure and filtered water pipe line at a suitable distance of 5 - 10 Km, the following is made:

1. Implementing a pipe connection from the water source (filtered water line) to the new town using a suitable diameter of 150 cm. This pipe is made of castiron since its lifetime is more than the galvanized iron pipe, which is affected by static electricity.

- 2. Building a main ground tank to receive filtered water of 100m3 capacity.
- 3. Executing a pumping station to uplift water from the main ground tank to the water distribution network to the houses, where it ends into the ground reservoir of the housing units, previously built in the first phase. Those ground reservoirs are used to control water distribution, especially with the possibility of delay of water supply from the main source. The pumping station consists of water pumps mobiled on wheels.

## B) Second Alternative:

In case of locating the new town far from a source of filtered water, but there is an availability of drilling potentialities of wells having a safe drinking water for human consumption, the following is made:

- 1. A well is drilled and fitted with a pump, which requires an electricity generating unit (Diesel type) to operate the pump.
- 2. Constructing a ground water tank having a capacity of 100 m3.
- 3. Constructing a pumping station to lift up water, as in the first alternative, to the water distribution network then to the ground reservoir of the houses.

# C) Third Alternative

In case of locating the new town near an existing city network, the traditional method of water supply is adopted by connecting the water network of the new town with the nearest water supply line of the city, having enough pressure and capacity to supply water to the housing units of the new town.

## D) Fourth Alternative:

In case there is no source of filtered water near the new town location and there is no underground water suitable for human consumption, but there is a canal of a suitable distance of 5 Km, the following is made:

- 4. Preparing a water source on the canal.
- 5. Implementing a water filtration unit having a capacity of purifying 500 m3 / day. This unit consists of three mobiled compact units to cope with the phasing of development, and each unit is executed complete with its pumps and an electricity generating unit, diesel operated.
- 6. Constructing a ground water tank to receive the filtered water resulting from the compact units of a capacity of 1500 m3, which represent the water consumption of one day. It is preferable to divide the ground water tanks into three smaller tanks, each having a capacity of 500 m3. This division is done to facilitate cleaning and maintaining the tanks, as well as to construct each tank according to development requirements.
- 7. Constructing a water distribution network as in the first alternative.

# **4.3.3.3.** Phasing the Construction of Electricity Network in the Development Operation

Electricity in the new town could be obtained from traditional resources such as electricity generators or the state united electricity network or from new resources such as mechanical energy from the wind, solar energy from the sun, nuclear energy or energy from burning wastes. These new resources are still under study and experiments by the scientific research centers, and utilizing them in new towns is determined according to the availability of these new resources, their technical, economic and environment aspects. On the other hand, utilizing the

Traditional resource of electricity for the new town is done in two phases, coping with the growing needs for electricity, as follows: (11)

#### First Phase

In the first phase of the development operation of the new town the number of settlers estimated is 1000, occupying about 400 housing units.

- The average electric load needed for 400 housing units estimated IS 2 K.V.A.
- Total electric load needed for 400 housing units  $2 \times 400 = 800 \text{ K. V.A.}$
- Electric load needed for street illumination estimated is 20 K.V.A.
- Electric load needed for pumping water estimated is 50 K.V.A.
- Total electric load needed for the first phase 870 K V.A.

As the total electric load will not be needed all the time, but about 80% of it will be needed during the peak hours. Thus, the average of electric load needed is about 700 K.V.A. To provide the required electric power, it needs a diesel power generator station, which consists of two diesel generators, each with the capacity of 700 K. V.A. working alternatively, besides the third diesel generator of a capacity of 300 K.V.A. as a standby.

The diesel generator station is to be located far from the residential areas and near the location proposed for constructing the water pumping station or the sewage disposal station in the future. This will facilitate using the diesel generator station in the first phase of development as well as in the following phases as a standby station for the main electric current which supplies the new town. If this station is located far from the residential areas for more than one kilometer, so there will be a need for using transformer units for raising the electrical potential

<sup>11.</sup> Ref: An interview with Eng. Samy AI-Hadary Electrical Consultant Engineer, at the Center for Planning and Architecture Studies, 1991.

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Produced by the generators, and another transformer units for lowering the electrical potential near the residential area (Fig. 4.11).

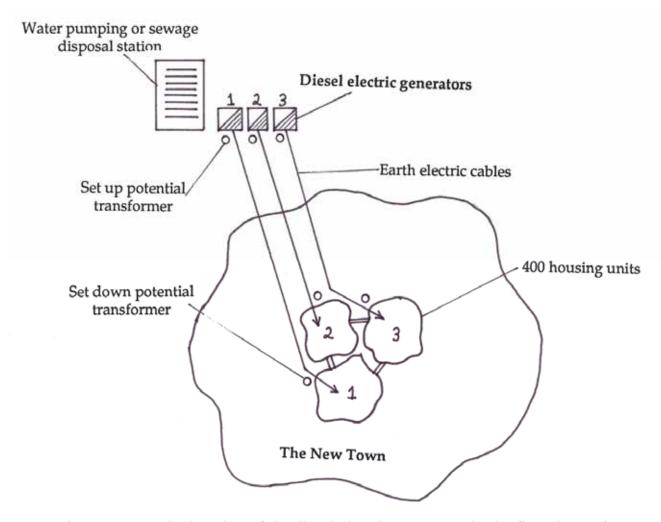


Fig. 4.11: The location of the diesel electric generators in the first phase of development

This matter requires the study and design of all the connections and the electricity network for the first phase of development so as to be a part of the general electric network of the new town during the different development phases. Therefore, using "modular system"" in setting the designs of the electrical network will facilitate phasing the provision of electrical power. Each module consists of a residential area of 400 housing units and its own diesel generator, besides the electrical network connecting the generator with the housing units. The modular system facilitates connecting each urban development phase of electrical supply with the others.

Electric connection is made between the residential areas, taking into consideration that each area consists of 400 housing units. Generators of each area are, also, connected with each other.

#### Second Phase

With the increased number of settlers in the new town, the technique of using diesel electric generators becomes not economic; especially when the number of housing units exceeds 2400, with an electric load needed more than 5 M.V.A. In this case there is a need for constructing high potential transformer station to link the new town with the state united electricity network. Thus, the main electric power resource for the new town will be the state united electricity network, while the diesel electric generators will be used as a standby electric resource for water pumping stations or sewage disposed units. The lifetime of the diesel generators range between 10 -15 years, which is enough for the first phase of the development operation.

The high potential transformer units are constructed according to a new modular unit. The capacity of the new modular is 2400 housing units with electric load of about 5 M.V.A. Therefore, constructing the high potential transformer units copes with the new town growth, through modular system, and with the increase number of settlers (Fig. 4.12).

# 4.3.3.4. Phasing the Construction of Sewage Network in the Development Operation

According to the conventional planning concept, providing the new town with sewage network is done through implementing a complete network in the first phase of its development including pipes, pumps and purification stations. The diameters of the sewage pipes and their declination are designed to serve the new town in the future. This means that the design of the sewage network is defined

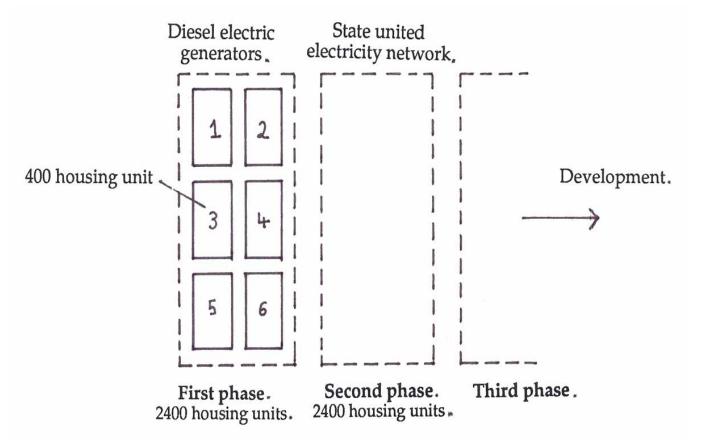


Fig. 4.12: The capacity of the modular system in the first and following phases of development

According to the expected needs of the settlers in the later phases of the development operation. Thus, due to the small number of settlers in the first phase of development, the volume and speed of sewage in the pipes will be less than the designed minimum level of disposed water. This will lead to the blocking of the sewage pipes and their overflow. Moreover, since the sewage network will not be utilized with its full capacity except in the last phase of development, so this will lead to freezing large investments without reasonable profit in return. Also, this will lead to the shortness of its lifetime and will require frequent maintenance work.

Phasing the construction of the sewage network will avoid the existence of these problems. These phases have to cope with the development phases and with the unexpected and changing factors that affect the new town development. Phasing the construction of the sewage network is to be done according to the increase number of settlers, as follows: (Fig. 4.13)

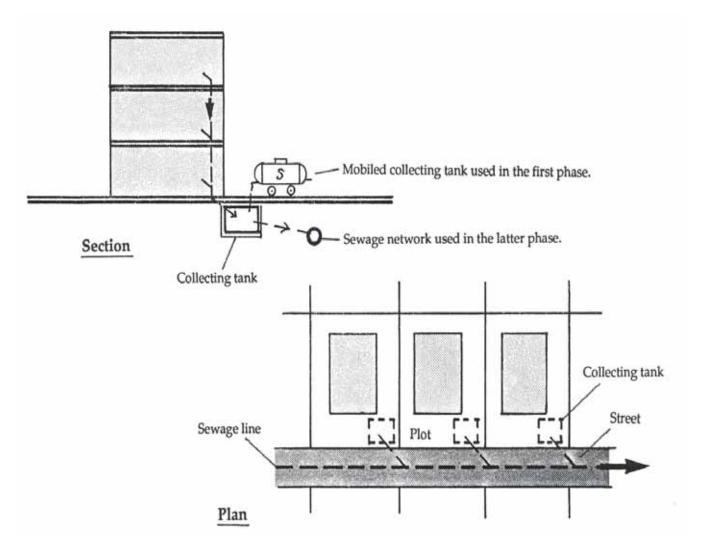


Fig. 4.13: Phasing the construction of sewage network

#### First Phase

In the first phase of developing the new town, where the number of settlers is small, it is expected that the settlers consumption of water is to be about 150 liters/settler/day. And, whereas 80% of the water consumed in residential areas goes to the sewage network, therefore, the average settler disposal of sewage is to be: 150 liters/settler/day x 0.80 = 120 liter/settler/day.

The total disposed sewage of 1000 settlers in the first phase = 120 liters/settler/day x 1000 settler = 120,000 liters/day = J20 square meters/day.

Therefore, in the first phase it is appropriate to build a tank to collect the sewage of housing units. This tank is to be built in the ground in front of the housing unit, with solid walls and floor, as to prevent the pollution of soil. The walls of the collecting tank are to be constructed from cement blocks on a concrete floor, and with a concrete roof slab. The roof slab has an opening door for inspection and for clearing away the sewage. The collecting tank is to be isolated from the outside by betomin, and to be plastered from the inside with anti-sulphate plaster.

To clear away the sewage from the collecting tank the agricultural tractors, used in pulling water supply tanks, are to be used after adding a small pump to take out the sewage from the collecting tank to a mobile tank drawn by these tractors. Mobile tanks for sewage are to be painted in different color from the similar tanks used in supplying water. The sewage is then transported outside the residential area and disposed in a special large pit in the ground for purification through its exposure to the sun and air. This pit is known by "oxidization pool" and its depth is from 1.5 to 2 meters.

The capacity of the collecting tank is to be determined as follows:

The disposed of a housing unit = 4 settlers x 120 liters/settler/day = 480 liters / day. The collecting tank capacity is to hold the disposal of each housing unit for up to 15 days. Therefore, its capacity for each housing unit is =  $15 \text{ days } \times 480 \text{ liters/day} = 7200 \text{ liters}$ , which is about 7.5 square meters for each housing unit. A number of housing units can be served by a bigger collecting tank.

This method of sewage collecting is considered more economical than constructing the traditional sewage network in the first phase of development. The cost of building the collecting tanks is inexpensive; however, these tanks will not be used in the next phase of development. Also, one of the disadvantages of this

Method is that it requires a continuous clearing away operation every 10 to 15 days; otherwise, there will be sewage overflow.

#### Second Phase

In the second phase of the development operation of the new town, where the number of settlers will reach 10 000 settlers, compact units for sewage treatment are to be used. This requires the construction of declined sewage pipes with appropriate diameters to collect the sewage from the housing units to the pumping stations. The pumping stations are located in the lowest area in the new town to be able of receiving the sewage from the declined pipes, by the effect of gravity, and to pump it to the compact units of sewage treatment. These compact units are located far from the residential areas, at least 500 m, and opposite to the prevailing wind direction in the new town. Water resulted from the compact units is to be use in irrigation and reclamation projects, and resulted solids are to be used as an organic fertilizer for the agricultural land.

The capacity of the compact unit is bout: 10 000 settlers x 120

Liters / settler/day = 1200000 liters/day.

= 1200 square meters/day.

It is appropriate to contrast three compact units for sewage treatment, with the capacity of 400 square meters / day for each unit. This is done so that constructing the compact units is provided according to the increase in the number of settlers, and accordingly, the increase in the volume of sewage. It is worth mentioning that these compact units can handle double their capacity but only for two or four hours a day, during the peak hours.

#### Third Phase

In the case of increasing the sewage volume of the new town for more than 5000 square meters/day, serving more than 40 000 settlers, it is appropriate to build a traditional sewage treatment station for the new town, as it is the case in the Existing cities.

The declined sewage pipes and the pumping station built in the second phase will be used in this phase of development as a base for constructing a complete traditional sewage network for the new town.

## **4.3.4.** Managing the Development Operation

The concept of development operation depends on the efficiency of organizing and administrating the new town development, otherwise, the plans lose their theoretical contents. The efficient management of the development operation depends on the ability of the NTDA to convert the plans into working procedures to execute a number of activities whether in receiving new settlers, accommodating, or providing services to them. This is besides providing other incentives and facilities in the new town. Settlers have to have a role in managing the development operation of their town through their participation in the decision making process, in implementing, operating and maintaining their different projects. This aims at strengthening their feeling of belonging to the new town, to create a sense of community among them and to increase their social and cultural awareness.

The technique of organizing and administrating the development operation is to be modified to be appropriate with the nature and requirements of each development phase. In each development phase the assignments, job description, administrative procedures and the staff qualifications of the NTDA are defined, as well as of the authorities responsible for executing services and urban projects. Moreover, in each development phase the relation between the local development authorities and the central development authorities and the way of decision making is defined, besides determining the available resource for financing the different projects. The nature of the integrated and complex relationship among the different actors in the development operation, coupled with the integrated administrative procedures require a special flexible and realistic system to manage the development operation.

Thus, this will be reflected on the urban planning of the new town which will be flexible and will guide the development of its different Components in an integrated, balanced and organic manner, during the different phases of development, to cope with the changing and unexpected factors which it will face. This can be achieved through using a modular cell, a defined area, which is located, gathered and multiplied to form the urban fabric of the new town. This cell can accommodate the different types of housing or services projects according to the prevailing requirements at the time of taking the decision of implementation.

# **4.4.** The Comprehensive Approach to the Management of Development Operation of New Towns

It is clear from the past experience of the development of many new towns in Egypt and abroad that a new comprehensive approach for the management of the development operation is of great importance. It is also evident that development is a comprehensive process comprising the physical planning as well as the social and economic development of the new settlers. The development process as a continuous operation has to be guided by an effective system of management. This depends on the managerial and organizational concept to be applied in the new town. This is the key point in the management approach. There are two options for this approach; the first considers the management authority as a governmental body, which has to adopt the rules and regulations applied in the governmental system. This is the present system applied in the new towns in Egypt, as well as in other countries with slight differences. The second, which is considered the recent trend, is to manage the development of new towns as a semi-private interprise which has the capability of decision making. The management here will be to satisfy certain targets defined within the national urban strategy. In this case the management of the new town is run by an executive council composed of a number of developers and representatives of the different ministries concerned. The status of the development authority is considered as a holding company, which is to be assigned to develop a certain site for a certain objective within a certain time as part of a regional strategy.

This chapter tends to define who does what, how and when, starting with the plan and ending with the completion of the new town when it achieves its objectives, after which it becomes part of the local government system. The new town site is selected and defined within the regional context, approved by the government. After that, the development process starts by establishing the holding company which will be concerned with the development process with all its Components.

The holding company will work to achieve economic benefits as well as certain social benefits. The main operation is to re-settle a defined number of inhabitants coming from old and crowded areas. The re-settlement operation therefore, will cover all social, economic and physical components of the development operation the problem then is how to organize the holding company as a development authority of the new town. The holding company might comprise a number of companies concerned with the major aspects of development which are defined in the following system:

- 1. Public utilities.
- 2. Public services.
- 3. Housing.
- 4. Industry and agriculture.

Each of these systems might be broken down into a number of subsystems each could be implemented and operated by a private company. These subsystems will be established within the development program laid down by the holding company, which is considered the main developer and investor at the same time. The holding company could be named the New Town Development Authority (NTDA). This is not the place to refer to the legal and financial foundation of the holding company. This is controlled by the law applied in the country. This chapter will be confined to the technical as well as the management aspects of the development operation.

#### 4.4.1. The Pre-investment Study

A pre-investment study should be prepared by a group of experts assigned by the development authority of .the new town before taking any further steps in the development operation. The pre-investment study aims at clarifying the following aspects:

1. The existing forces which attract the inhabitants of the crowded areas to live in the new towns. This includes the evaluation of the existing rules and regulation which help the development of new towns and to what extend they constitute an effective factor in the development operation.

- 2. The availability of resources for water and electricity and the implications involved in their utilization.
- 3. The existing regional transportation system and to what extend this will affect the development operation specially in its early stages where the dependence on the regional services, found in the near settlements, will continue for a certain time
- 4. The economics of building and construction in the new site. This requires a survey of building materials and labour required for the development operation and whether the building operation will be carried out by the conventional contracting system or by establishing a local building center in the site of the new town.
- 5. Investigating the potentialities of economic and social development in the new site, including the integration of the different components of economics, Le. Industry, agriculture, or tourism if found in the site.
- 6. The evaluation of the environment impact on the urban development in the new site, this requires a physical survey of the site.
- 7. Investigating the number and qualifications of the personnel required for the development operation as a continuous action. This includes the nature of activities required for the different stages of development. The preparation of a guideline program of work is required at this stage. Also, this study should examine the possibilities of housing the personnel in the new site where the development operation actually starts.
- 8. The collection of available data and information required for the development operation including land survey and soil characteristics.

9. Investigating the different administration and managerial approaches required for the development operation. This will define, also, the administrative relations between the development authority, as a holding company, and the different public and private institutions who may be involved in the development operation.

- 16 Investigating the financing resources required for the different stages of the development operation. This includes the role of investment banks, private and public financing agencies. The price of lands allocated for development will be a crucial factor in the economics of development. This can be part of the economic support given to the development authority beside other facilities and incentives.
- 17 Determining the equipments, purchased items, buildings materials transportation and communication required for the different stages of the development operation.
- 18 The program of action required for the development operation with its integrated functions and activities, including the qualifications and number of personnel estimated for the different activities of the development operation. The planning process is part of this operation.

## **4.4.2** The Design of the Development Operation

The development strategy of the new town is defined as a result of the pre-investment study, and according to it the development operation can be designed. The design of the development operation involves the following aspects: (Fig. 4.14)

1. The design of the management process represents the guiding factor to the development operation. The management process defines the main lines for who does what and how along the time span of the development operation.

This covers the three main components of the development operation, Le., the physical as well as the social and economic aspects. This means that the development of the new town will run along the three main lines in the same time. The first deals with the preparation of physical planning and the execution of the infrastructure as well as the super-structure along the time span of development. The second deals with the economic aspects of the development operation. The third deals with the social development of the new settlers. The three main lines of development are integrated within the development operation as one comprehensive action. The construction sector as a common factor in the development operation will gain special importance in the management of the operation as a local building center.

- 2. The design of the physical planning process as part of the development operation. The design concept of the planning process should provide the natural growth of the urban areas according to the increase of new settlers number and their need of housing, services and work. The design concept has to cope with the management process of the development operation.
- 3. The design of the economic development operation involves the potentialities of industry and agriculture development in the new site within the framework of the national policy.
- 4. The design of the social development operation involves the provision of social services as well as upgrading the cultural and living standards of the new settlers. This, also, includes the management of settlers participation in the different phases of the development operation.
- 5. The design of the local building center which would supply the construction needs of the development operation. The local building center will cover three main activities. The first is the provision of the necessary building materials and equipments for all construction work.

The second is the provision of contractors' work when required. The third is the provision of training facilities to those who will work in the construction industry, or to those who would like to participate in the construction activities by themselves.

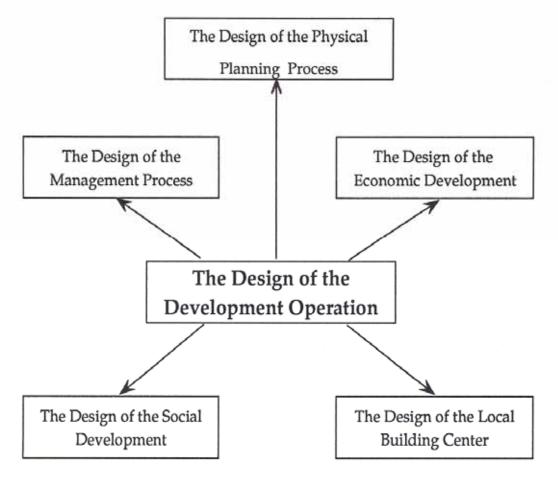


Fig. 4.14. The different aspects involved in the design of the development operation.

The development operation will require a well established data and research section capable of feeding the previous five main areas of activities with all the updated information required for the development process. This will facilitate the decision making process at all levels and for all activities.

It is clear from the above analysis that the preparation of physical plans, required for the development operation, constitutes a continuous process along the Time span of the operation.

This means that the guide plan should provide the adequate space for expected or unexpected changes in the development operation. This, also, means that the guide plan should be prepared in conjunction with the design of management system which will be applied to the development operation. An adequate follow-up and evaluation process should also be applied in order to facilitate monitoring the development operation of the new town which takes a long time to be completed and become part of the local government system.

### **4.4.3.** The Design of the Management Process

The management of the development operation changes from one stage to another. This is why it is considered as an operation and not a stable system. In its initial stages it involves a large part of the management of the initial construction projects and the promotion of the large development projects. A main part of the management will deal with the marketing and information activities. In due time the management will cover a new area of activities including receiving the new settlers and providing them with all requirements and services in the new site, or in the nearest settlements specially during the initial stages of development. An adequate transportation system should be established to serve this purpose. The management process, later on, will be direct to settlers participation and urban management. All this aspects have their financing and legal components.

The management process, covering all aspects in the different stages of development, should be built up gradually and parallel to the growth of other components of the development operation. The management process as such could not be only limited to the design of administrative structure and job description, but should be translated into a series of manuals covering the following areas:

ManualNo.1: The management of the data and research section.

ManualNo.2: The preparation of guide plan and action areas plans.

Manual No.3: The management of the information and marketing section.

- Manual No.4: The management of settlers participation.
- Manual No.5: The management of housing process: decision making, planning, design, construction, operation and maintenance.
- Manual No 6: The management of investment process: application, license, follow-up and evaluation.
- Manual No.7: The management of financing aspects: preparation of budget, programming, purchasing, accounting, taxes, loans, fees or salaries.
- Manual No.8: The management of administration affairs: employment, contracts, insurance, rules and regulation.
- Manual No.9: The management of the local building center: contracting, building materials and equipments and training.
- Manual No.10: The management of public utilities: (water, sewage, electricity and gas): decision making, planning, design, construction, operation and maintenance.
- Manual No.11: The management of public services: schools, health center, commercial, social centers, etc...
- Manual No.12: Urban management: markets, garbage collection, landscape, building inspection, traffic and transportation management, building license.

The preparation of management manuals constitutes the major achievement of the management process. The more these manuals are clear, simple and well prepared the more they become effective. The manuals help the stability of the management of the development operation. They, also help to avoid changes in policies and instructions. The management manuals are the core of the development operation. On the other hand the manuals will greatly help in the

Training of new personnel appointed in the different departments and sections of the NTDA. (12)

The design of the management process, therefore, becomes the main guide which monitors the development operation. It is now clear that the need is for more management and less planning. Physical planning, in this concept, becomes one component in the development operation of new towns.

#### **4.4.4.** The Departments of the New Town Development Authority

The New Town Development Authority manages the development operation of the new town through its different departments and sections. These departments are: the data and research department, the technical department, the housing department, the information and marketing department, public service department, settlers participation department, finance and investment department, administration affairs department, landscape and vegetation department and legal department. The assignments and job description of these departments and their sections are defined as follows:

## 4.4.4.1. The Data and Research Department

The data and research department comprises four main sections as follows:

- 1. Physical and urban data.
- 2. Social and population data.
- 3. Economic and financing data.
- 4. Research and studies.

Each data section deals with the following activities: collecting, storing, upgrading and retrieving the data in an unified format which could be easily computerized. The data could be numerical, figurative, illustrative or tabulated.

<sup>12.</sup> Center for Planning and Architecture Studies, <u>Urban Planning! Manuals</u>, General Organization for Physical Planning, Ministry of Reconstruction, new communities and Land Reclamation, September 1984.

The illustrative data could be categorized or composite showing overlaying physical data.

#### 1. The physical and Urban Data Section

The physical data is to be built according to a real survey units within the geographical survey grid in order to facilitate the location reference at any time along the time span of the development operation. The physical and urban data includes the following information:

- a) Contour lines on survey base maps.
- b) Land subdivision system and building lines.
- c) Land use and building use by floors.
- d) Water network by size, depth and direction-cost/unit: (constructed, under construction or planned).
- e) Sewage network by size, depth and direction (Constructed, under construction or planned).
- f) Electricity network by size, load, depth and cost/unit (constructed, under construction or planned).
- g) Gas network by size, depth, direction and cost/unit (constructed, under construction or planned).
- h) Road network by width, direction and cost/unit (constructed, under construction or planned).
- i) Foot path network by size, direction and cost/unit (constructed, under construction or planned).
- j) Soil type: by characteristics and depth.

The Geographical Information System (GIS) will be used as a tool to facilitate the computerization of physical and urban data. The site of the new town will be divided into a number of area units with a reference code number Comprising all types of data and information referred to before. The information would be gathered gradually and up-dated along the time span of development.

The road coded file contains each intersection in the network and type of connections. The file also contains primary, secondary and public transport routes. The intersections are classified into level, round about or multi-level junctions, and public transport stops. The results of periodical traffic surveys are added to the files. This will help the coordination of traffic densities to the phases of road construction as required.

The land use coded file records all physical data provided by the prepared plans and then by the actual situation after implementation. The land use data is located for each parcel by zone. The parcels are created as measurable area units specially for the spatial distribution of zonal quantities. The coded data file records the information contained within each zone, the parcels within each zone, and the land use of each parcel. The land use is complimented by building use by floor as planned and then as implemented. The land use digitized data file records the use and its area within the boundaries of each parcel. (13)

The road and land use coded files should be complimented by the infrastructure network with their technical data. This facilitates getting the overlapped picture of all physical information in each parcel in each zone. The soil style data could be added to other files plus the ownership status for each lot in each parcel.

The physical data could be retrieved on unified format separately or compiled. This could be produced on printed sheets by the printer (or plotter) attached to the computer station. The information sheet should be designed in a Unified format showing the code number of zone, parcels and lots, complimented by the data of collection and data of retrieval with the scale of drawing retrieved and name of owner or tenant.

<sup>13.</sup> Robert Cheesman, New Towns: The Data Bank. its Construction and Organization, University of Cambridge, Department of Architecture, January 1972, p:9.

#### 2. The Social and Population Data Section

The social and population data is gathered gradually according to the flow of new settlers in the new town. The social data in classified according to job, sex, age, level of education, place of work, place of origin, family size, number of children, average of income and interest in settlers participation in social and building activities (Table 4.1). The data is also gathered according to the coding system for lots, parcels and zones applied to the physical data. The social data is gathered according to a unified format with the same reference information applied to the physical data. The housing data is included in the same file of the population data with reference to each family. The housing data sheet includes the address by lot, parcel and zone, as well as the floor and flat number. Also, the data includes the area of the housing unit, number of rooms and level of accommodation, as well as rent or price of purchase and loan installments. The data could be retrieved according to family structure, housing accommodation, rent or loan installments and date of payment.

#### 3. The Economic and Financing Data Section

The economic and financing data includes the price of land per square meter, lot, parcel and zone. The budget allocated for each project by category, location and size. Each budget is divided by installments according to program of expenditure on each project phase. The data also includes all information required by the finance department to monitor and follow up the expenditure of each project. The data, on the other hand, includes the resources of finance: loan rent, sales, fees, and other resources. The data of expenditure is classified into salaries, purchase, construction, publications, equipments, transportation, maintenance, operation and others.

Table (4.1): Application to Settlers in the new towns.

### 1. General Information

1.1. Name:	surname		Fath	ner	Family	
1.2. Address:	No.:	Street	District		City	
1.3. Identification code No.:	No.:	Issue	Family		Person	
1.4. Present job:	Employmen	t Craftsman	Private		Others	
1.5. Family members:	Wife	Son	Daughter		Other	
1.6. Kind of housing occupation:	Rent	Private	Shelter V		With others	
1.7. Housing Condition:	Good	Moder	Moderate		Bad	
1.8. Family income per month:	Under 100 L	E 100-300	100-300 LE		Over 300 LE	
2. Resettling Demands in the New Town						
2.1. Number of rooms in the new house	One Room	Two Room	n T	Three Or more		
2.2. Appropriate time to settle after	One Year	Two Year	Two Year C		Others	
2.3. Housing occupation required	Rent	Private	Private Wit		Others	
2.4. Living in housing group with	Complete	Core House				
	Any body	My family	Friend	ls	Others	

**Employment** 

## 3. Settlers Participation Ability

2.5. Nature of Job required

- 3.1 Level of participation in housing projects
- In decision making.
- In planning and design.

Private

Craftsman

Others

- In organization and management.
- In implementation.
- In maintenance.
- In collecting loans repayments.
- 3.2. Means of housing construction through
- Main contractor.
- Local contractor and settlers participation.
- Settlers participation.

3.3 Nature of settlers participation in Housing - Physical effort. construction. - Financial contribution - Organization ability. 3.4 Ability of physical effort in housing - Mutual help. Construction through: Self help. - Cooperatives. - Hired labour 3.5. Participation through physical effort in - Masonary work. - Plumbing. - Carpenter. - Finishing. - Electrition. - Labour assistant, 3.6. Ability of financial contribution in - 20 - 50 LE per month. - 50 - 100 LE per month. housing. - 100 - 150 LE per month Kind of housing required - Housing plot. - Core house. - Shell house. - Complete house. 3.8 Housing ownership ability - Immediately. - After 25 years. - After 50 years. 3.9 Participation ability constructing School. in services - Clinic. - Shops. - Administration building. 3.10 Participation ability productive - In a market. in - In a work shop. projects - In an office. - In a company.

#### 4. The Research and Studies Section

The research section will be responsible for the preparation of studies required to monit or the development operation and to supply the decision making process with the results achieved. This section will prepare the follow-up reports as well as the evaluation of performance studies. Also, it will prepare the studies required by the technical department in the field of design, planning and construction. Moreover, it will prepare the feasibility studies for the different projects within the development operation. All the data gathered in this department will be available to the research section. This is why the data and research section are integrated in one department.

According to the above description of activities in both data and research sections the job description and qualifications of the personnel required for each section can be prepared. It should be clear that each section will be built in stages. The data section will get the first priority as the key point in the management process. According to the activities of the two sections the equipments required will be specified including the computer stations, hard and soft ware required for their operation. The design of the place of work will then be prepared according to the number of personnel and type of furniture required.

This is how a department can be established. First by spelling out the activities, the personnel who will carry out these activities and then the place which will accommodate this personnel, along the different stages of the development operation.

## **4.4.4.2** The technical Department

The technical department comprises the following sections:

- 1. Socio-economic and physical planning.
- 2. Architecture design.
- 3. Construction management.
- 4. Public utility.

#### 1. The Socio-economic and Physical Section

The physical planning section deals with the preparation of the development operation and the planning operation and consequently the plans which enhance the development system. This means that the physical plans cope with the design of the development operation and serve its components. The plans, therefore, are considered as a product of the development operation and not the opposite. This concept guides the management process of the social and urban development process. This section, therefore, deals with the preparation of action area plans with the planning process in order to accommodate the new settlers and provide them with the necessary services according to the size of the community and the planning standards applied during the natural growth of the new town.

The action areas in this process present the subsequent increments of the natural growth of the new town. The planners in this section try to house the new settlers as they apply and come to work and live in the new core town. They will use the housing group unit as a cell in the planning process. The neighborhood is built gradually by a number of housing group units. This means that the different compounds of the neighborhood grow gradually in an integrated manner. The planner will use the core development system in the design of housing growth, the school, the shopping center as well as the utility network. The planners should have the tools (manuals, standards, computer programs) which enable them to cope with the gradual implementation of the plans. The new settlers will be classified according to their income as well as their cultural level, and also according to their type of work or employment. They are also classified according to the family size as well as age, and sex groups. This will facilitate the accommodation process.

The planner will get the information required for their work from the data and research department. The planning manual will explain in more details the planning process including the instructions and illustrations which explain the planner's work. The manual, also, deals with the organization of work and place. The output of this planning section is the detailed plans required for execution in

stages. This will be controlled by the project management process.

The output will come out in unified format whether in the form of sheets, maps or reports. The physical planner is complemented by economic, social and utility planners. They compose the planning group. The economist and the socialist will be partners in the development operation and not to prepare the economic and social studies as in the conventional planning process. The job description of each partner in the planning process, from experts and supporting staff will be prepared according to the role of each partner.

This planning section will provide the executive council with the different alternatives for development in order to help in the decision making process. This section will follow up the implementation of plans and the buildings within them, on which the following plans could be built according to the existing circumstances at that time.

#### 2. The Architectural Design Section

This section deals with the preparation of the design of all public buildings to be built in the different stages of development. The design concept of the different buildings should adopt the core system which helps the construction in different phases in order to cope with the growing needs of the new settlers (Fig. 4.15).(14) the school should be built in stages as well as other public buildings (Fig. 4.16). The design section should work in direct cooperation and relationship with the planning section on one hand, where the design program is prepared, and on the other hand with the local building center where the construction will be dealt with. This means that the design should use the building systems, the equipments and materials available in the local building center. Also, the design should take into consideration the ways and means of constructing, whether by settlers participation, by full contracting or by partial contracting. (15)

<sup>14.</sup> Ref.: Dr. Hessen Ibrahim, Article on: Planning new settlement for low income Families, <u>Alam Albenaa Magazine</u>, Center for planning and architecture Studies, 44th Issues, April 1984 (In Arabic).

<sup>15.</sup> Ref.: Dr. Abdelbaki Ibrahim, Article on: How can the household complete his house by himself, <u>Alam Albenaa Magazine</u>, Second Issue, September 1980 (In Arabic).

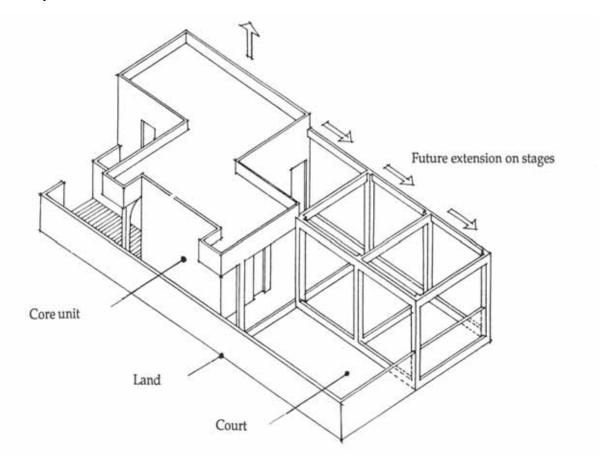


Fig. 4.15.1.: Components of the core unit

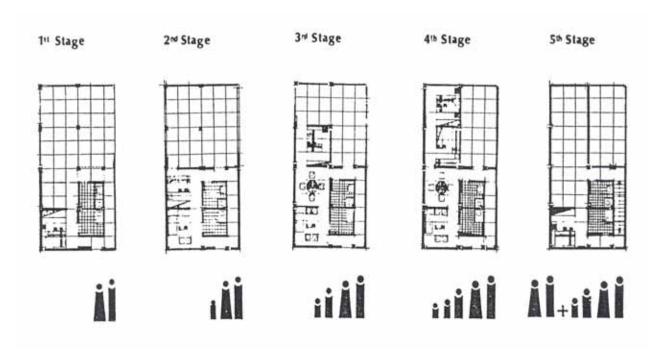
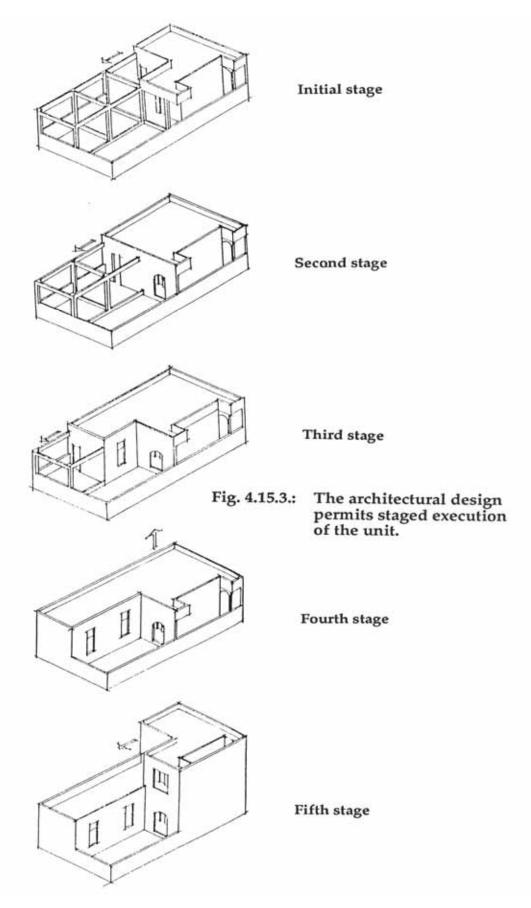


Fig. 4.15.2.: The execution stage is done according to the settlers needs and ability



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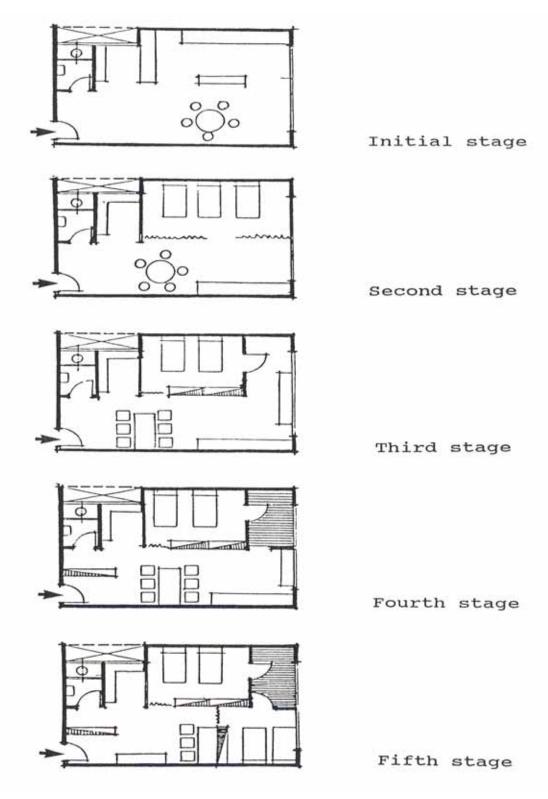


Fig. 4.15.4.: The household improves and completes his own shell house according to his own needs

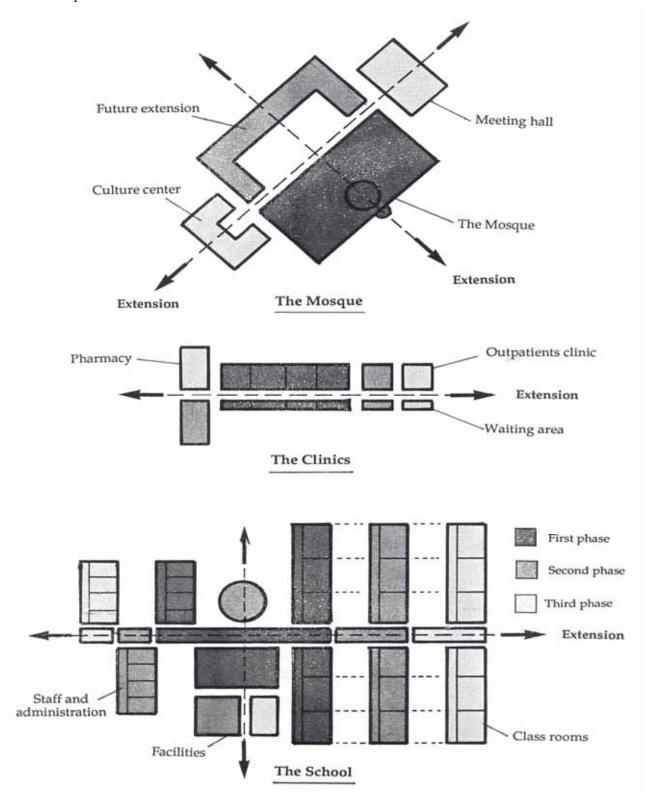


Fig. 4.16: The core concept is applied in the architectural design of different public building such as: the mosque, clinic and the school.

This section will try to give the architecture of the new town its local characteristics. The architecture vocabulary which helps this objective should be available in the architectural manual. This will require a computerized system (CAD application) for the preparation of working and detailed drawings. The working drawing should be coded with the relevant code used in the preparation of quantities and specifications. The design section can provide its services to the private sector with special fees in order to encourage the owners to adopt the local architecture characteristics to their buildings.

This section should have full information about the soil type in each area coded by lot, block, parcel and zone as applied in the planning section. The filing system of architecture projects should be easily retrieved as referred to. The information in the drawing sheets should be carefully designed in order to satisfy these objectives. The number of personnel including the architects, the construction engineer, the utility engineer and quantity surveyors should be estimated according to the size of work expected in the different stages of development. Accordingly the required equipments are then defined. The arrangement of the working space can be organized in such a way to increase the productivity of the personnel.

## 3. The Construction Management Section

The construction management section will be responsible for monitoring the construction process of the public utility network as well as the public buildings along the development operation of the different increments of planning. This will be a continuous process as far as the new town is growing. The construction management section will prepare the program of construction for all projects at hand in a coordinated system. The tasks of this section will not only be confined with construction programs of each project, but moreover with the coordination of all the relevant programs. This will be a very effective factor in the construction of Public utility network in each increment in the development operation.

This was absent in the urban management of the existing new towns.

The construction management section will apply the relevant computer programs in order to facilitate the monitoring process. The qualifications and number of personnel required for this section depends on the size of work involved in each stage of the development operation. The arrangement of place of work will be designed according to the type of equipments and furniture required. The construction management manual will be the guide for the work in this section. The task assigned to this section will be coordinated with the other sections of the technical department including planning, design and public utilities on one hand, and the local building center on the other hand where more integration of tasks has to be achieved. The local building center will be the main body responsible for the construction of the different projects as the main local contractor.

#### 4. Public Utility Section

The public utility section deals with the planning and design of public utilities networks: roads, water, sewage, electricity and gas. This section includes sub-sections dealing with the planning and design of each of the different networks. They work together in a coordinated manner with the planning section. Their approach is how to plan and design each network which can be implemented according to the incremental growth of the core town. They aim at utilizing the incremental parcels of the network to the maximum and in stages according to the needs of the new settlers till they reach the optimum size at each stage of development. The public utility network should follow the planning modules applied by the physical planners.

This section will get the information required from the data and research department. It is there where the coordination between the different departments and sections should be organized. This is the major force which enhances the Development process.

The coordination system is designed within the program of work to be assigned to each section or sub-section as a continuous operation.

Modulation and unification aspects should be applied in the preparation of plans and designs. This is one of the most important factors which enhance the production process of the plans and designs, and which consequently enhance the construction process. The modulation and unification aspects and procedures will be explained and illustrated in the relevant manuals.

The place of this public utility section should be physically adjacent to the planning and design sections where the coordination system should be enhanced. According to the tasks assigned to the different sub-sections, the qualifications and number of the personnel can be defined according to the needs of the different stages of development. The tasks to be assigned to each sub-section will be included in the relevant manual. Also, the equipments required for each subsection could be defined and consequently the design of the place of work could be prepared. The public utilities section should receive the follow-up reports of the execution process from the construction management section in order to adopt their next plans and designs with what has been executed.

#### 4.4.4.3. The Housing Department

The housing department will be the authority which deals with all housing activities in the new town. This department will provide all the services required in this field. This will cover all financing aspects as well as the provision of housing units required in each phase of development. The application for housing provision will be received by the department, and classified according to type, size and location. This department in coordination with the planning and construction management section will prepare the program of housing. In the mean time the housing department will be ready to receive the new settlers and accommodate them temporary in special housing, where they can spend a certain period of time through which they will be able to submit their housing requirements to the Department and participate in the building process if they wish. They will be, also, educated and trained to adopt themselves to the new life in the new town.

They will be trained how to participate in the development operation during the early stages of resettlement. On the other hand, the new settlers will be trained how to take part in the planning and design process. The settlers participation department will work parallel with the housing department. (16)

## 1. The Reception Section

The reception section in the housing department should be designed in an agreeable manner. The reception staff should be carefully selected as they are the first people the new settlers will meet. They should be well trained, well dressed and hospitable. Each new settler will have a special file. Also, each housing building will have one file. The reception staff will be trained to help the new settlers to fill their forms. They should have the necessary illustrations, drawing and modules of small or full size if possible. The reception section should have the full information about design, areas, and materials, finishing, cost and time of provision of the housing units. This section will deal with three categories of people: new resettlers who wish to be housed in public houses, new resettlers who wish to participate in the building process of their houses, and people who want to invest in housing projects, small or large. The reception staff should have all the information related to plans design, regulation, legal and finance aspects. This information and others should be copied in well presented booklets.

The reception section will collect the application forms and classify them in categories and then send them to the planning and design section as well as to the local building center where they will be treated as an input to their housing program. A proper computer program should be designed to serve this purpose. The housing program should be integrated with the overall program of providing the public utilities and public services.

It should be clear that the provision of utility networks and services will be implemented in two stages: temporary and then permanent, when the number of settlers reaches the optimum size of planning unit.

<sup>16.</sup> Department of Economic and Social Affairs, <u>Basics of Housing Management</u>, United Nation, New York, 1969, p: 2.

## 2. The Follow-Up Section

The follow-up section in the housing department should work hand in hand with the construction management department. This section should build its working system as applied in the construction management department. This section should prepare its follow-up reports monthly in order to be circulated to all relevant departments in the development authority, within a well established circulation system of information. The follow-up section will include the financing position, the construction achievement, the provision of utilities and services. This section will have an effective role in controlling the balance of the development process between housing, services, utilities and job opportunities.

#### 3. The Finance Section

The finance section in the housing department will deal mainly with the financial aspects of the housing process, including receiving the down payments, finance installments, rents or cost. This section will receive the allocated fees for licenses, cost of water, electricity, operation, maintenance and security. This section will deal with the majority of settlers, and therefore, special care should be taken to the way of treatment and handling the financial aspects with the new settlers, especially in the early stages of development in order to build the confidence between the authority and the settlers. The selection of the personnel of this section should be carefully considered in terms of skillfulness and smartness. This is an important factor in the management process.

## 4. The Operation and Maintenance Section

The operation and maintenance section is another important body in the management of the housing process. This section deals with maintenance of areas outside the houses and the installation inside the houses.

The section will be part of the operation and maintenance center with other sections covering other areas like roads, sewage, water electricity and gas networks.

This section should be on call around the clock. This section, like others in the operation and maintenance center, will provide working opportunities to a number of qualified technicians. The efficiency of this section is considered another attractive factor in the development of the new town. This section, like others in the operation and maintenance center, will be established with the first new settlers who live in the new town. The personnel of this section can be recruited from the technicians who were involved in the construction process. The size of the section will increase according to the increase of number of settlers. A certain system for managing the operation and maintenance should be well defined and known to the settlers. The certification and specialization of the technicians should be well considered. They will be provided with the adequate tools and spare parts necessary for their work.

According to the job description of the personnel required for each section and the tools and equipments needed, the space design for each section can be defined. Each section should have its working manual spelling out the way of performance of each job and the format of reports, receipts and bookkeeping.

## 4.4.4.4. The Information and Marketing Department

This department will deal with two main functions. The first is the provision of all information required about the development of the new town including housing, investment, public utilities, and services and working opportunities. The second is the provision of all services required for the promotion of new projects including industries, housing and services. This department is the show window of the new town where people can visit and get the necessary information required about the new town. This department is also considered the reception center where entertainment and hospitality facilities have to be provided for the visitors. It will receive people interested in investing in the new town as well as people interested to live and work there.

Therefore, the department will be provided with the facilities capable of receiving groups of people. A news center will be also established in order to issue the press releases at certain times.

#### 1. The Information Section

The information section will comprise a reception area, an exhibition hall including plans, maps and models. A lecture hall with the facilities for projecting films and slides should be also provided. This is beside a small cafeteria and relevant facilities, a lounge and meeting room. This section should offer honest and actual information without exaggeration. The privileges and incentives provided to the new settlers should be clearly explained in posters, booklets and films. The information section should encourage visits to the site of the new town. This can be through seasonal festivals, markets and entertainments activities. This is an important factor in attracting the people to the new town site and to be more familiar with it. A proper transportation system should be organized, not only to attract the people to the new site but also to serve the new settlers in commuting to old towns to use the services which are not provided in the new town, especially in the first phase of development.

The information section should give special care to explain the role of settlers participation in the development operation, and to show how this will have financial and economical return to those who wish to take part in this operation. This aspect should not only be explained by lecture or films but also by practical examples on site. The response of the visitors to this aspect should be recorded and evaluated in order to help the implementation of the concept of settlers participation.

In all information areas the visitor should feel that he is well served and well informed. In this case, visitors should know that the management of the development operation is in the hands of a holding company through a number of specialized companies, with minor interference from the government.

The visitor should know more about the management and organization of the development operation. This should be explained in a simple and attractive way with the appropriate media. This information section should extend its activities to a wider range through the different information media, magazine, news paper, radio and television. The latter has a very effective role in this respect. The official departments in the government should give the good example in the development process and give priorities for their investment projects to be located in the new towns.

The personnel to be appointed in the information section should be well trained and qualified. They should master more than one language. They should know how to address the different standards of people according to their interests. They should be patient and hospitable. This will be explained in the job description for each post. The information section will be the first gate to the new town. This is why certain importance should be given to this section which will be established in the first stage of development. And, this should be reflected on the design of the place.

#### 2. The Marketing Section

The marketing section will deal with all investment activities provided in the new town. This section should provide the investors with all the necessary information related to the cost of land, the lease system, the purchase procedure, source and cost of energy, water, communication facilities, transportation, roads, sewage, site topography and soil types. It also provides the investors with the different rules and regulations applied in the development operation and how to proceed with them. The marketing section may act on behalf of the investors in the procedures required in the legal aspects which might involve more than one authority in the government. This depends on the clear rules and regulations which will guide the work in the holding company. The marketing section should be Familiar with the investment, financing and banking system applied in the country.

This section should expand its activities to attract foreign and local investments.

The activities of this section is very much related to the activities of the information section in the same department. This is why the information and marketing department will be the first establishment to be built on the site of the new town. The setting and the building of this department as a core to the offices of the development authority should be given careful consideration for attracting the people to the new town. The output of the activities of the information and marketing department activates the development operation. The rate of development depends on the products of this department. This is why the personnel required for this department should be carefully selected, trained and recruited. They should be well selected in the first stage of development.

## 4.4.4.5. Public Services Department

Public services department deals with monitoring all public services including religion, education, health, recreation, culture, social, security, fire traffic. taxation, fighting, transportation, real estate registration, communication and justice. This department will coordinate all these services according to the needs and requirements in the different stages of the development operation. This department will be assigned to prepare the program for each function including level, capacity, area, equipments, personnel and location. This will be prepared in coordination with the planning and design sections in the technical department. The public service department will then prepare the investment program for each function or service for the different stages of development.

The design of the required buildings will be assigned to the technical department, and the construction will be assigned to the local building center according to the standards and requirements applied for each function and after the official approval of the ministries and public authorities concerned.

This department will also control the construction process for each function in coordination with the construction of housing and public utility networks, in each increment of development. A coordination system should be built, programmed and computerized for all construction projects including housing, public services and public utilities.

The building of public services will be built by the development authority on behalf of the different ministries concerned. These buildings might be owned by the development authority of the new town and lent to the different ministries concerned for their management and operation or it could be staffed by the ministries concerned, and managed and operated by the development authority of the new town. A common understanding between this authority and other ministries should be clearly established in order to satisfy the main objectives of the development operation.

The public services department can comprise four sections each of them deal with a group of services. The first section deals with the group which comprises religion, education, culture, and recreation functions. The second deals with health and social security. The third section deals with real estate registration, taxation and justice. The fourth section deals with security, traffic, communication and transportation. The four sections will be stationed in the main administrative building of the development authority. The main objectives of the four sections is to serve the new settlers by providing them with the relevant services whether in the new town or in the nearest settlements, specially in the early stages of development. Students who wish to go to high schools or universities should have the adequate means of transportation. Others who wish to join a secondary school should find places in the nearest school till the first stage of a new school is built in the new town. The same example can be applied to the provision of health services as well as social security, taxation or other services.

Special care should be given to the new settlers at the early stages of development, in order to enhance the attractive factors to the new town. This department should also give similar care to the personnel working in the different services as they are the first settlers. They will compose the core community together with the personnel of the different departments of the local development authority. The Imam of the Mosque will play an important role in the social development process. The public service department will play a great part in the participation of the settlers in the different types of services.

## **4.4.4.6.** Settlers Participation Department

Settlers participation department will be established in a later stage of development when a reasonable size of new settlers is reached. The department will provide the facilities to enhance the idea of settlers participation in all functions. The objectives of the department is to establish the core of the local council. In this way the department will encourage the settlers participation in the development operation. It will help the target groups to participate in the production of building materials, carpenting, plumbing, electrical, painting, plastering and other services on local small scale industries. The department in this way will provide the skill labour for the local building center as well as for shopping and municipal functions.

The department will organize the target groups and train them to participate in building their own houses. It will try to create a strong sense of belonging in the new community which will be composed of different people from different social status. In this case the department will arrange regular meetings, seminars and recreation activities in order to bring the settlers together and make them feel at home. Therefore, the department has to play a role in facilitating the life of the new settlers. At the same time, the department will establish and manage the first social club, where seminars, meetings, training courses and cultural and social activities can be held.

The club will expand its activities According to the rate of the increase in the number of new settlers. The social club will be the core of the local council.

The personnel required for this department will be chosen according to the job description of each assignment. They will include trained technicians, social services officers, and sports trainers. The number of personnel will be defined according to the needs in the different stages of development. The place of work will be estimated according to the number of employees and according to the type of activities to be provided in the social club, which will include the administration rooms. The social club will be affiliated to the Mosque together with the clinic, the local library, the exhibition and a multipurpose hall as the main components of the civic center of the new town.

The settlers participation department will have in a later stage, three main sections. The first deals with social activities, the second with technical and training activities, and the third with entertainment and cultural activities. The three components of the department can be established in phases. This is where the architecture design of the public building should cope with the staging of construction according to the different stages of development. The balance between the number of new settlers, their needs and working opportunities should be always preserved along the span of the development operation.

The activities in the different sections of the settlers participation department should follow the manual to be prepared for the different functions. Proper training modules can be applied and evaluated after certain intervals of time. These modules can be provided by the HABITAT in the case of housing and public utilities.

## 4.4.4.7. Finance and Investment Department

This department is composed of two main sections.

#### **The Finance Section**

The finance section will follow and apply the rules and regulations of the development authority as a holding company. This section will deal with the different financial activities in the authority of the new town. This includes the selling or lease of lots for investors or new settlers according to the format and instructions prepared jointly with the planning and information department. Also, this section prepares the budget and controls the expenditures of the development authority. It deals with all financial affairs of the different departments of the development authority. The system should be carefully spelled out and illustrated in a manual showing the different steps to be taken in all financial procedures. This manual could be complemented with the approved format of receipts, contracts, orders and book keeping. The manual should be available for the personnel working in this section as well as other departments and public or private agencies who have business with the new town authority.

A proper filing system should be established and computerized in this section the files will cover several activities like; banking, taxation, rents, loans, purchases, salaries, services, utilities, contractors and new settlers. The number of the personnel required for this section and their qualification can be estimated and defined according to the requirements of the management along the span time of the development operation. The space required should be flexible to accommodate the number of the new staff expected in each stage.

#### The Investment Section

The investment section deals with all matters related to investment activities. This section has special importance for facilitating all the procedures the investor has to go through.

It can act on behalf of the investors to solve any legal or financial problems, in order to encourage local and foreign investors to invest in the new town. Financial problems, in order to encourage local and foreign investors to invest in the new town. The investors should be well received and well informed with all physical, economic and social implications involved. This section shouldhave a well edited and presented brochure showing all projects available for investment including area of land, location, type of industry, size of capital involved, feasibility study, legal and finance incentives, taxation and customs, rules and regulation. The investors should be given full information related to availability and cost of energy, water, sewage, road and communication systems. Also, they should be informed with the development programs, the action area plans, date of delivery of site served by the necessary public utilities, together with the building rules and regulations to be applied in the site allocated for each project.

The investment section should work in continuous relation with the information and marketing department. The personnel assigned to work in this section should be familiar with all legal and finance implications involved in the investment process. They should be ready to offer a number of alternatives for the investors. The place of work in this section should be well furnished and provided with meeting rooms and lounges as well as typing and translation facilities. It should be known that this section is the key for the development operation as it will encourage the investment process and consequently there will be more job opportunities for the new settlers.

This section is to be established at the early stage of development. It should be in continuous contact with the head of the development council for any immediate action needed. This is where flexibility of action should be required. The personnel who work in the finance and investment department will be part of the core community of the new town.

#### 4.4.4.8. Administration Affairs Department

The department will deal with all administrative affairs such as appointment of staff, contracting, insurance, taxation, vacations and transportation. The department will also deal with the evaluation of performance of the employees and their promotion or ending their contracts. It will be responsible for the preparation of manuals required for the different departments in order to enhance the performance in the different activities of the development operation. The activities of the department also include the arrangement of time sheets which control the productivity of each member of the staff employed. It will also deals with all out coming and incoming correspondence for all other departments.

The department will be responsible for the provision of transportation required for the staff in or out the new town. Printing machines, typewriters, copying machines, binding and packing will be provided in the department. The department will keep a well organized and computerized filing system for all departments. All the administrative orders should be published and announced by this department. The department should be in direct contact with the secretaries of all other departments.

The number of personnel required for the administrative department can be defined according to the job description prepared for each job. The department will be built gradually according to stages of development. The staff employed will be part of the core community of the new town who should work and live in it. They should be carefully selected in order to show the best example for the new settlers.

## 4.4.4.9. Landscape and Vegetation Department

This department deals with all landscape and vegetation activities. It starts by establishing a nursery which will provide the new town with all types of trees. The program of cultivation follows the development program bearing in mind that the big trees need a period of three years to develop.

Shrubs and flower plantation need less time to grow. The department will deal with the beautification of the approaches to the new site of the new town. It will be responsible for the landscape of the first stage of development including the sites of the administration building, the social club and the mosque. The department will provide the plantation in streets, squares and open space. It will be responsible for the continuous care of the permanent plantation using the modern technology for irrigation.

The landscape department should work with the settlers participation department in order to involve the new settlers in the beautification of their community. This is an effective factor in the development operation. The school should play an educational role in this connection. The department should apply modern techniques in following up the growth of each tree or group of trees. The landscape architect in the planning section should be in continuous contact with this department. The landscape design for each area will be prepared by the planning section and implemented by this department. This department will also provide plantation for private spaces.

## 4.4.4.10. Legal Department

The legal department deals with all legal aspects related to the development operation. This covers contracts, agreements, loans, investment and legal disputes. The legal department will advise the new investors in all relevant problems. It will also facilitate all legal aspects for the new settlers as well as the investors. The legal department will be in close relation with the executive council of the development authority. A proper reference should be established for all relevant acts in the local law or other foreign law. The department should be familiar with judgment and evaluation systems in order to be able to solve any dispute according to international rules and regulations. A proper filing system for each case should be established.

## 4.4.5. The Administration Structure of the Development Authority

The administrative structure of the development authority can be designed according to the requirements of the management process, as explained before showing the role of the different departments and sections concerned. In this respect the development authority will be headed by an executive council and managed by an executive director who is assisted by two assistant directors. The first for the technical affairs and the second for the financial, administrative and legal affairs. The office of the executive director will be supported by four offices; the expert's office, the information and follow up office, the secretariat office and the security office. Other departments and sections are classified in the administrative structure as follows (Fig. 4.17).

## **4.4.6.** The Decision Making Process

The first decision to start the development of a new town comes from the central planning authority, or the council of ministries on the recommendation of the ministry of construction and housing, or whoever is concerned. This recommendation comes within the framework of the regional planning studies or the national urban strategy. The decision making process starts with the official decree which approves the establishment of the new town within the regional planning context. The decree includes the general lines which guide the development operation of the new town. It includes the legal status of the authority which will be in charge of the development operation. The decree, also, includes the general lines which define the role of the different authorities and agencies concerned, mainly the ministries of planning, construction, finance, transportation, defence, agriculture and culture (antiquities). Moreover, the decree defines the general financial resources as well as the management concept of the new town as an independent or semi-independent authority with its relationship with the central authority concerned. The degree includes the composition of the executive council of the new town. The management concept of the new town will be defined according to the general policy of the state. In this case the executive council would be given the concession of development as a share holding company.

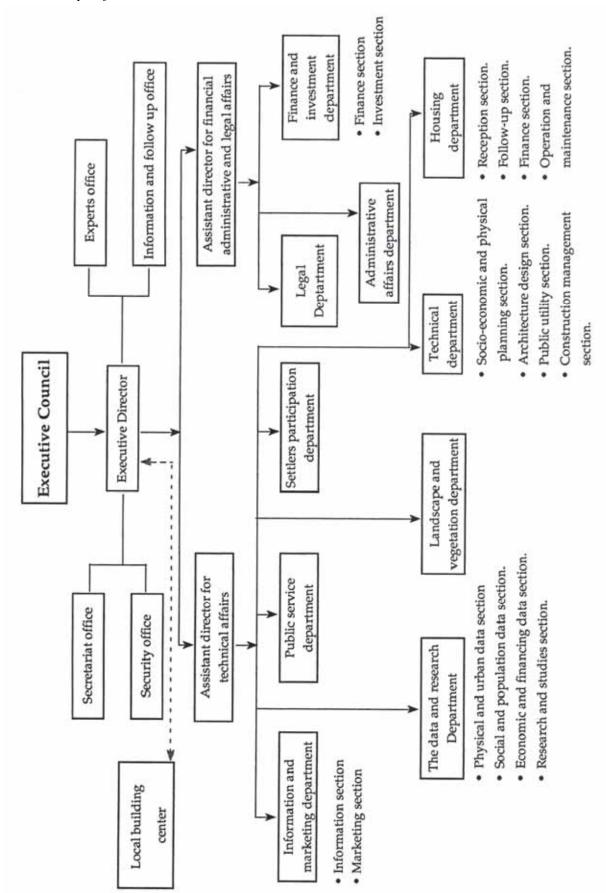


Fig. 4.17. The Proposed Administration Structure of the New Town Development Authority

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The second decision to be taken by the executive council is to choose and approve the management process from a number of options presented by the technical committee which will be appointed especially for this purpose. The third step to be taken is to appoint the executive director of the development authority who will take over the responsibilities assigned to him by the executive council. These responsibilities have to be carefully spelled out in more details for the actions to be taken at different stages of the work and the objectives to be achieved according to which the executive director will report to the council. The executive director will then prepare a number of options for the planning process to be applied in order to present them to the executive council to study, evaluate and approve the selected option together with any adjustments required. The planning process will be coupled with the design of the economic as well as social development operations, as they are the two main supports to the physical aspects of the development operation. When a decision is taken in this concern the detailed assignments will follow for action starting with the preparation of the different manuals for the different departments of the development authority. These manuals, whatever time is consumed for their preparation, will facilitate the work in all sections afterwards

The decisions taken will be confined to the executing actions with the framework of the policies already approved before. In this case the decision will be taken inside the development authority. This will be the main role of the executive council. The decision making process should first be performed on the technical level before being reported to the executive council to take its decision. On the technical level of the development operation the decision making process should be well designed in order to involve all heads of departments and sections to take part in this process. The decision making process does not only aim at reaching the most proper decision but also getting the heads of departments and sections to play an active role in the integration of all findings and developing a healthy Relationship between them.

The decision making panel will select or delete any point according to their importance and priorities. The panel can call upon outside experts to take part in the process whenever required for a technical issue. When a social issue is to be examined, or exposed to the panel to take a decision, representatives of the new settlers can be invited to take part in the decision making process.

The management and performance of the decision making process is an important factor for its success. The arrangement of place and the tools used for illustration are another important factor. The actors in the decision making process should perform their role as part of their job and not as an occasional act. They have to be prepared with all relevant information and data. Therefore, the decision making process enhances the integration of knowledge as well as the coordination of work. This game will be managed and controlled by the executive director or by one of his assistance. The preference between decision options should be guided by the objectives of the development operation as well as the changing factors affecting it. This is where political, financial and physical issues have to be raised. The decision making process in this manner should not hinder the development operation, but be an activating factor. Discussions should be limited to the point in time without any aside issues which might divert the panel to other subsidiary problems. This is the democratic way of the decision making process.

The decision making process might deal with one main issue which involves other issues. In this case the panel should concentrate on the main target issue without any diversion to others. This research is oriented mainly to be physical issue of development as been affected by the economic and social aspects. Other studies might be mainly oriented towards economic or social issues which might have their impact on the physical aspects of the development operation. This means that the decision making process can be diverted from one issue to another according to the type and nature of issue raised

## 4.4.7. Physical Planning in the Management Process

It is clear from the previous studies that the planning process is an integrated part of the development operation. It goes parallel and integrated with the management process as well as the economic and social development process. In the technical department of the development authority, the physical planner as well as both the economic and social planners get their required information from the data and research department. The three planners work parallel in the first phase of analysis. They meet to integrate their findings in one package after which each one of them works parallel with the others in the second phase of policy making, and then bring their findings together in order to draw one integrated policy. Then they separate to work on the work program for the implementation of the integrated policy each in his own domain. They come together after that to draw up the integrated program for action. Each one will act separately in the execution process of his part in the integrated program and come together every now and then for reviewing and coordinating their projects (Fig. 4.18)

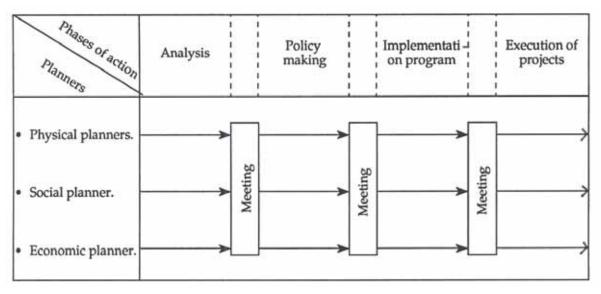


Fig. 4.18: Phases of actions for the physical, social and economic planners

In this case, the physical planner is not the leader of the development operation, as in the conventional approach, but the physical, social and economic

Planners work together in setting the integrated development program. After setting the executive process, each project will follow its own program of execution separately. The synchronization of actions and the integration of projects need a well equipped operation room with a staff capable of monitoring the development operation with all its different components. The time, effort and money spent on these arrangements is profitable on the long run. The development of new towns is mainly a managerial and administrative problem.

The physical planner in this mechanism should follow the incremental phasing system which cope with the decision making process. A wide area for the flexibility of use should be provided. A planning modulation system should be established. Each module should be capable of accommodating different types of usage within the framework of planning rules and regulations. The planning concept will enhance the provision of variety within unity in order to cope with unseen circumstances. The same planning concept can be applied on the design concept where a building module should be established for the different types of buildings. This concept will also be adopted by the local building center. This means that physical planning of action areas and architectural design are oriented by the managerial factors as a result of an integrated program of action for the economic and social development. The physical aspects of planning and design become a complimentary factor more than a basic one. Of course, the local buildings materials available in site and the construction system to be adopted will affect to a great extend the architectural and urban aspects of the new town. Tradition and local artistic motives could be applied to the architecture of the new town.

Planning standards and planning modules will be the main tools in the planning process. The planner will be free to accommodate the different land uses required according to the immediate needs in each stage of the development operation.

This means that there will be flexibility in land subdivision system within the planning module, where land can be divided to lots according to the different needs for land. Flexibility should be provided to enable the planner to convert the traffic way to a pedestrian path when the decision is taken in this concern. The size of the planning module should be able to accommodate a reasonable number of inhabitants, which helps the establishment of a communal life with a sense of neighborhood, or accommodate a reasonable number of activities.

## 4.4.8. The Planning Module as a Tool in the Planning Process

The planning process requires a great deal of flexibility in order to meet the changing situations and the variables which may occur during the development operation. This concept requires the tools which help the planner to cope with the changing factors. One of these tools is the planning module which represents a unit area which can accommodate a housing neighborhood or group of buildings of relative functions. The planning module can also accommodate a school, hospital, a club, a religion center, a shopping center, a hotel or other uses. This planning module was defined as an area of 16200m2 (180 m x 90 m) - (17) which is about 3.86 Feddan. This area can accommodate from 750 to 1000 persons with a density from 200 to 250 persons per feddan, and every 6 to 9 planning modules can be considered as one neighborhood. The area unit, of the planning module, can accommodate two schools, one for girls and another for boys. It can also accommodate a football playing ground and a club house. The same area can accommodate a shopping center with office buildings on top of it. The planning module, on the other hand, can accommodate a group of factories of relative functions (Fig. 4.19).

<sup>17.</sup> Ref: Center for Planning and Architecture Studies, <u>Detailed Plan for TOD</u>

<u>Priority Area No.1 for Settlement No.1</u>, General Organization for Urban Planning, February 1990, p: 35 (In Arabic)

The planning module will be used to build the physical pattern of the new town. The module can be used as the basic planning unit in the central spine as well as the secondary spine in the new town. The planning module as such will guide the street pattern of the new town. The street pattern, consequently, guides the pedestrian spins in the planning modules.

In brief, the planning module can accommodate any land use required at the different stages of development. From the economic point of view, the planning module can accommodate the size of project(s) which can be feasibly financed or managed. Also, it can accommodate a housing project(s) which can be feasibly financed or managed. From the social point of view this size constitutes a neighborhood unit where people can develop a sense of community between the new settlers. The idea of the planning module as such facilitates the management of the development operation which depends on the actual data for all planning components and not on data abstracted from a series of calculations as in the case of the conventional planning approach.

One planning module of housing units can be served by local shops and a kinder garden. When a number of planning modules is reached (4500 to 6000 inhabitants) then they can be served by two primary schools, a social center and a clinic. The shops can continue along the main spine which connects the six modules. The public services buildings can be built in stages according to the growth rate modules. The planning module as such facilitates incremental growth of the new town. This is why it facilitates the management of the development operation. This, also, proves that the physical planning process serves the management objectives of the development operations, and not the opposite when management is introduced after the preparation of the physical plan as in the conventional concept (Fig. 4.20).

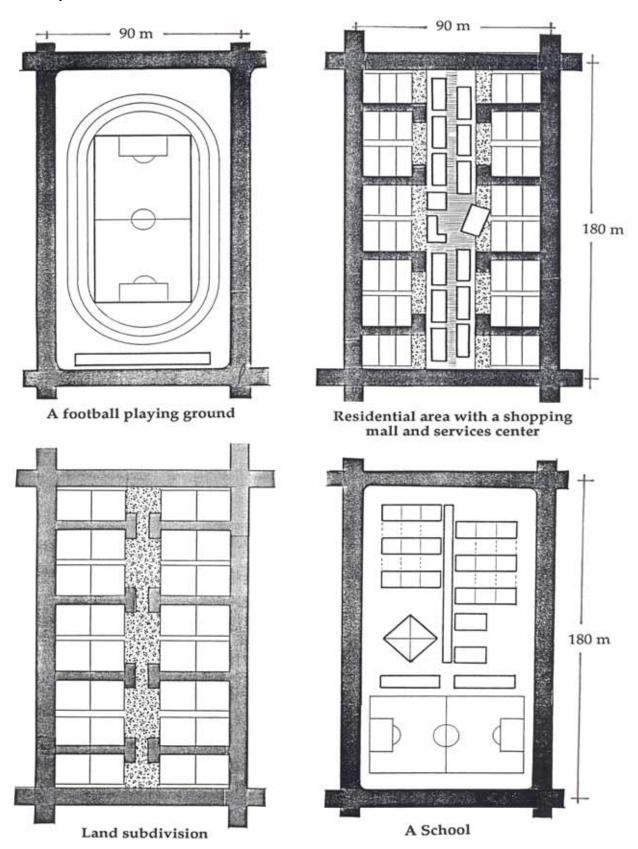


Fig. 4.19: A Planning module can accommodate different kinds of functions.

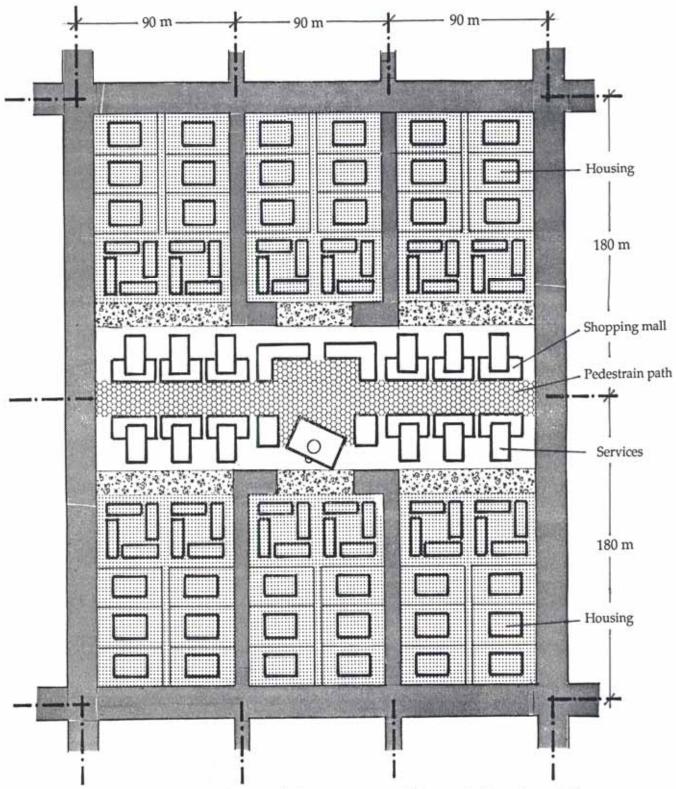


Fig. 4.20: Six planning modules are connected to create the spine of the new town including shopping mall, services center, offices and housing blocks.

# 4.5. The Local Building Center as an Element of the Development Operation of the New Towns

The local building center is considered the motivated force, in the urban development operation of the new towns. This center is considered an important element which cannot be separated from other components of the development operation, although it might have its own organizational structure.

The local building center is not only considered an economic sector within the national economy, as industry and agriculture, but it is considered as a public utility. It supplies the construction process with all their needs, whether they are general contractors, or providing the construction elements, labour force for small contractors, building materials or building equipments. Thus, this utility reduces the construction and building costs, lessening the percentage of commission and the agent profits given by the general or private contractors. The new utility also influences the construction cost by using standard prototype elements and unified measurements. This will result in saving building materials, equipments and elements of construction to be used by private contractors or individuals as self-help, or re settlers participation.

As the construction work in the new town continues, with all its components, during the different phases of the urban development operation, so, establishing a utility for building and construction to supply the construction operation with all their needs becomes an urgent need for the development operation. The building center as a utility will be considered a local industry with its finance, labour and production aspects. This calls for its integration in the organizational and administrative framework for the urban development operation in the new towns. The administrative and organization structure of the local building center directly relates to the nature of its activities, which may be summarized in the following:

## **4.5.1.** General Contracting Department

The general contracting department performs the following functions:

 Executing public infrastructure network such as water supply, sewage and electricity network.

- Executing main, secondary and local roads network.
- Executing public buildings such as: administrative, educational, sanitary, social and religious buildings.
- Executing governmental, cooperative and private housing.

The construction work can utilize the equipment and labour of the local building center. The local building center which is to be located in the new town, aims at providing job opportunities for new settlers and ensures the continuity of construction work in the new town. The building and construction work is normally characterized by the instability of permanent labour and depending on temporary labour, especially in the complementary works. The stability of construction work and the reduction of temporary labour will help the creation of supporting activities of a permanent nature. This will not be affected by the time schedule programs of projects execution. These supporting activities ensure the continuity of work in the local building center during the different phases of the development operation.

The planning designs of the infrastructure networks, roads, and the architectural designs of the public buildings have to provide construction phases for their different projects in a way to cope with the development and settlement phases in the new town. This approach ensures the continuity of work in the building and construction field. Thus, this approach enables the estimation of the required capability of the general contractor work in each phase of the development operation process. The general contractor department capability should be improved to cope with the increase of construction rates in the different urban projects.

Thereby, the concept of development operation links the development programs with the settlement programs and, also, with the construction and building programs. This requires a high level of performance in the administration and organization aspects in managing the new town development and, also, in the local building center. Thus, using computer programs becomes necessary for such organization, to record the types of building materials, construction equipments, architectural and construction elements and to record their consumption rate, as well as the number of labour needed for the construction projects in the different phases of development.

## 4.5.2. Building Industry Department

Including the following:

- Manufacturing all kinds of building materials locally from the raw materials available in the site or nearby.
- Producing pre-cast construction units on a standardized basis.
- Producing the installations and ready-made architectural elements for finishing the buildings from inside.
- Providing labour groups and building materials necessary to interior finishing.

These activities supply the development operation with its needs, especially in the field of housing projects whether they are built by craftsmen, or small contractors, or by individuals through the different modes of self-help. These activities represent an industrial base having a feature of continuity, and at the same time supply the general contractors with their need of building materials, construction equipments, pre-cast elements and temporary labour. This industrial base, moreover, provides new opportunities for work, production and settlement in the new town.

The building industry department is considered a part of pre-investment economic studies which determine the expected amount of consumption of the different kinds of production.

Accordingly, the volume of the building materials and the number of labour required for the first development phase are determined. These economic studies, also, include the raw materials and the basic components of the building industry, whether they are available in the site or nearby, and the related transportation of the industry materials or the external products. Consequently, the size of expected investments in the different development phases can be determined, and then the administration and organization structure of the building industry can be defined.

## 4.5.3. Sales Department of Building Materials

Including the following:

- Selling different kinds of building materials, including cement, tiles, marble, paints, sand, lime, etc....
- Selling sanitary and electrical equipments and requirements of carpentry and smithery.
- Selling prefabricated partition, doors, windows, furniture, etc...
- Selling prefabricated units required for self-made (do it yourself), whether from wood, plastic or metal.

This department represents the commercial aspect of the local building center which provides the settlers and craftsmen with all their requirements for the building and construction operation. It is, also, considered the store for products for the general contractors department. The activities of this department are dealt with, in the same way as in the cooperative society with its economic, commercial and organization aspects. The settlers can buy their needs from this department to build, to modify or to complete their houses through different modes of self-help or mutual-help. The organization and administration of the local building center is connected with the organic organization and administration of the NTDA on the one hand, and with the phases of the development operation on the other hand. Thus, it becomes important to coordinate the planning, architecture and Construction aspects of the development operation.

Moreover, organizing and managing the development operation is considered a base for improving the performance of the NTDA and for attracting the settlers to the new town.

The local building center is financed by the general investments of the state or by the joint investments between the public and private sector. It may be financed also after implementing the first phase of the development operation, through converting the local building center into a joint stock company with the contribution of the settlers in the new town. The settlers will profit from the activities of this company through its production or its sales on the local level of the new town or on the national level. Consequently, it is possible to make preparations to convert the local building center into a joint stock company during the first phase of the development operation by locating the site of this center on the main roads which serve the different areas of the new town.

The main objective of this center is to supply the development operation with its needs at the lowest possible cost to encourage the settlers in the new town. This is beside the facilities which should be provided by other public utilities, such as water supply, electricity and telephone, at a relatively less charges than those paid by the individuals in the overcrowded areas. This means increasing the subsidies in the cost of services in new towns, which is balanced by decreasing the subsidies in the cost of services in overcrowded areas. This operation is known by "cross subsidy". Thus, incentive factors is provided to new town parallel to repulsive factors provided to overcrowded areas.

## **4.5.4.** Construction Training Center

The construction training center aims at increasing the re settler's awareness of the building skills by holding meetings and symposiums, showing demonstration films and holding training course for them. The center also aims at establishing a permanent exhibition of the building materials and construction equipments, not

Only to be acquainted with such materials, but with the methods of their utilization. This ensures that the organization and administration of the development operation affects the reconstruction operation of the new town, since it deals with the changing and unexpected conditions which face the new town development during its different phases of development. Therefore, building the construction training center follows the same approach of phasing the development operation that means phasing the building of the center according to the growing requirements of the community, and in the light of the variables which come upon it.

Building and construction works call for a special organization to build the new town by all means of self-help efforts and available potentialities of building material or labour. Therefore, the youth in the new town should be directed to the training on vocational production, in addition to a reasonable degree of general knowledge. If the educational curriculum in schools does not allow the modification of its programs to cope with the local living conditions and the environment requirement in the new town, so the local building center can have a role in this respect. The construction training center can add another activity in its field of training, not only on vocations directly related to the construction operation, but also on complementary crafts such as carpentry, smiting, plumber and electrical work. This aims at encouraging and attracting the youth to settle and work in the new town through assisting them to open small workshops and providing loans which enable them to initiate such activity. The training center, thus, becomes one of the key elements constituting the local building center, whereby it provides the trained labour to work in the building center or in the new town projects through the different phases of its development. Moreover, it prepares the youth to have a role in the development operation and to participate in planning, implementing, managing, operating and maintaining their new town. (18)

<sup>18.</sup> Salah Mohamed Dewidar, Article on "New Cities: urban Communities or Building structures", AI-Ahram El Ektisadi, Issue 1076, 28 August 1989, p: 14 (In Arabic).

The administration structure of the local building center with its different departments is illustrated in Fig. (4.21).

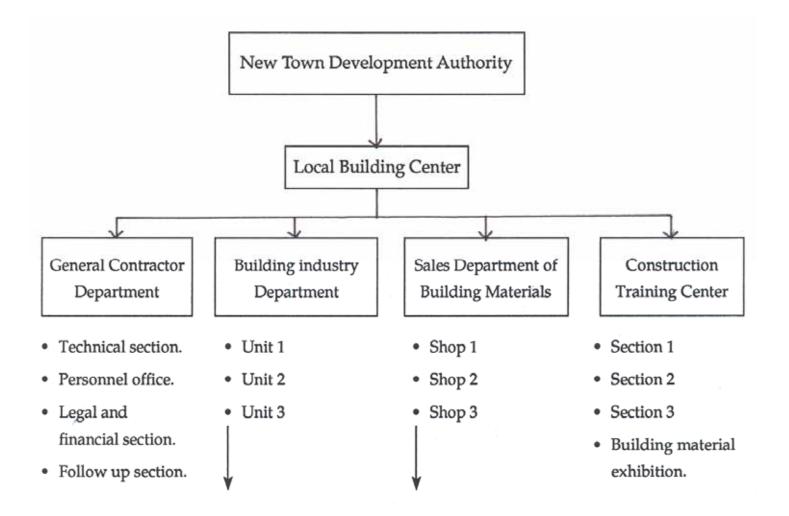


Fig. 4.21: The administration structure of the local building center

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جامعــة عيــن شمــس كليــــة المندســة قسم التخطيط العمر انــي

# ادارة عملية النمو الحضري في المجتمعات الجديدة في مصر

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رسالة مقدمة الي قسم التخطيط العمراني - كلية الهندسة جامعة عين شمس وذلك لنيل درجة دكتوراه الفلسفة في التخطيط العمراني

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## بعنوان ادارة عملية النمو الحضري في المجتمعات الجديده في مصر

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#### الملخص

تناقش الرسالة الجانب العملي في التنمية العمرانية للمجتمعات الجديده و المتمثله في ادارة نموها الحضري وهذا الموضوع يعتبر من المجالات الحديثة و الغير مطروقه في مجال التخطيط العمراني و التي لا يتوافر لها الكثير من المراجع و التجارب. وقد ظهرت الجوانب الادارية والتنظيمية للتنمية العمرانية في السنتين الماضيتين خاصة بعد أن ثبت عدم كفاءة الاسلوب التقليدي للتخطيط العمراني في تلبية الأهداف المرجوه منه وعدم مطابقة الفكر النظري بالواقع التطبيقي و عدم توافق التخطيط مع المتغيرات الكثيره التي تواجها أثناء التنفيذ.

ان اسلوب التخطيط العمراني التقليدي الذي يحدد الملامح العمرانيه للمدينة الجديده على مدي طويل من الزمن و ينفذ علي مراحل منفصلة كأي مشروع هندسي أصبح لا يحقق الأهداف المرجوه منه حيث ثبت أنه لايستطيع مواجهة المتغيرات الاجتماعية و الاقتصادية و العمرانية و السياسية التي تنشأ علي المدي الطويل من الزمن و التوافق معها.

من المعروف أن الاسلوب التقليدي لاعداد المخططات العمرانية للمدن الجديدة في مصر يبدأ بمرحلة وضع الشروط المرجعية و تحديد متطلبات اعداد المخططات العمرانية ثم تبدأ مرحلة تجميع البيانات و المعلومات و تحليلها للوصول الي التصور العام لتخطيط المدينة مع وضع التخطيط التفصيلي للمناطق ذات الأولوية في التتمية ويتم تحديد خريطة استعمالات الأراضي لكل مرحلة من مراحل التتمية مع تحديد اعداد السكان المتوقع تسكينهم في كل مرحلة وكذلك تحديد نوعيات الصناعات و الخدمات المتوقع بنائها و كذلك تحديد نظام الادارة المتوقع للمدينة.

كل ذلك عبارة عن توقعات محدده مستقبليه مبنية علي افتراضات قد تحدث وقد لا تحدث و ينتهي بذلك دور الأجهزة التي أعدت التخطيط و يبدأ من هنا دور أجهزة تتمية المدن الجديدة و التي تقوم علي تحويل الفكر النظري الي واقع تطبيقي من خلال تنفيذ المخطط كمشروعات Copyrights ©:: Center of Planning and Architecture Studies :: All rights reserved. www.cpas-egypt.com

منفصلة سواء كانت اسكان أو مرافق أو خدمات ويتم تنفيذ هذه المشروعات بأستثمارات ضخمة وتبني هذه المشروعات بكامل مكوناتها مرة واحدة لتخدم عدد من السكان قد يتم استيعابهم بعد فترة طويلة من الزمن.

وبذلك أصبحت أجهزة تتمية المدن الجديدة أجهزه تنفيذية فقط و ليس أجهزة تتمية لها سلطة اتخاذ القرار و سلطة تعديل و تطوير خطط التتمية و خلق توازن بين الاستيطان البشري و الاستيطان التتموي. الأمر الذي يؤكد علي وجود قصور في ادارة تتمية المدينه وعدم مقدرتها علي التكييف مع المتغيرات العديدة التي تتعرض لها التتمية سواء كانت متغيرات اقتصادية أو اجتماعية أو عمرانية أو سياسية.

#### الهدف:

تهدف الرساله الي البحث عن اسلوب جديد لتخطيط وادارة نمو المدينة الجديدة بحيث تتصف بالمرونة و تتوافق مع المتغيرات الاجتماعية و الاقتصادية و العمرانية و السياسية التي تتعرض لها مراحل التتمية وذلك من خلال الأهداف التالية:

- 1. تطوير اسلوب وضع أهداف التخطيط للمدن الجديدة من اسلوب ينفذ مخططات ثابتة لاستعمالات الأراضي الي اسلوب جديد يتصف بالمرونة و الاستمرارية و تحكمه أهداف وسياسات عامة وليست خرائط محددة ثم توضع المخططات التي تتمشي مع متطلبات كل مرحلة.
- 2. تطوير اسلوب المدينة بحيث لايعتمد فقط علي جانب التنمية العمرانية ولكن يجب أن تتوازن التنمية العمرانية مع التنمية الاقتصادية و الاجتماعية.
- 3. تطوير اسلوب وضع الدراسات التخطيطية التي تحدد المراحل المختلفة ومكونات كل مرحلة لنمو المدينه بعد فترة من الزمن الي اسلوب يتعامل بصفة مستمرة مع المتغيرات الاجتماعية و الاقتصادية و العمرانية التي يتعرض لها نمو المدينة و يتوافق معها.
- 4. تطوير اسلوب نمو المدينة من الاسلوب التقليدي المتمثل في تحديد التخطيط العام و التفصيلي للمدينة علي مدي مراحلها المختلفة و تنمية المدينة تبعا لذلك مرحله بعد مرحله الي وضع التخطيط لنواة المدينة بحيث تتمو المدينة في اطار مجموعة من النظم و الأهداف و القوانين التي تحكم نمو المدينه.
- 5. تطوير اسلوب ادارة المدينة من كونه جهاز تنفيذي لمشروعات سبق وضعها في مخططات تفصيلية الي جهاز لتنمية و تعمير المدينة يغير ويعدل في المخططات التنموية و الاقتصادية و الاجتماعية و العمرانية بما يحقق الأهداف العامة للمدينة وبما يتلائم مع المتغيرات التي يتعرض لها.

- 6. تطوير اسلوب بناء الهيكل التنظيمي و الاداري لجهاز تنمية المدينة من كونه هيكل يبني و يشكل بعد وضع المخططات العمر انية للمدينة الي كونه أحد عناصر التنمية.
- 7. تطوير الشكل القانوني لادارة المدينة الجديدة من كونه جهاز اداري يتبع قوانين و لوائح الأجهزة الحكومية الي جهاز له القدرة علي اتخاذ القرار بأتباع اسلوب الادارة بالأهداف الاستثمارية.
- 8. تطوير الهيكل الاداري و التنظيمي لجهاز تنمية المدينة من كونه جهاز ثابت و محدد الادارات و الأقسام و الاختصاصات الي جهاز اداري يتشكل و ينمو حسب متطلبات التنمية.
- 9. تطوير اسلوب المعاملات الادارية لجهاز تنمية المدينة من كونه يتبع تعليمات الاجهزة الحكومية المركزية الي اسلوب يلتزم بأتباع دلائل الأعمال والتي تشرح بالتفصيل جميع الخطوات لأي اجراءات ادارية.
  - 10. تطوير اسلوب اتخاذ القرار من كونه اسلوب اتخاذ القرار من الاجهزة الحكومية المركزية الي اعطاء جهاز تنمية المدينة الحرية في اتخاذ القرارات المرتبطة بالواقع المحلي بما يحقق أهداف التنمية الاقتصادية و الاجتماعية و العمرانية.
- 11. تطوير دور الجهة التي تضع التخطيط العمراني للمدينة الجديدة من قيامها بوضع التخطيط العام و التفصيلي للمراحل المختلفة لنمو المدينة بشكل ثابت و محدد الي وضع التخطيط التفصيلي لنواة المدينة مع وضع مجموعة النظم و القوانين و الأهداف التي تحكم نمو المدينة.
- 12. تطوير اسلوب تنفيذ التخطيط من تنفيذ مشاريع كبيرة للمواقف و الخدمات و الاسكان من خلال شركات المقاولات الكبيرة الي تنفيذ المشاريع التي تتطلبها المراحل المختلفة للنمو العضوي للمدينة وذلك بأستثمار مراكز البناء المحلية ثم بعد ذلك استثمار الجهود الذاتية.
- 13. تطوير اسلوب تنفيذ المشروعات من الاعتماد علي الاسلوب التقليدي في البناء الي الاعتماد علي تكنولوجيا البناء المتوافقه و مواد البناء المحلية الأمر الذي يستازم استحداث مراكز البناء المحلية لتغذية عمليات البناء و التشييد بالمواد و المستازمات و العناصر المعمارية المطلوبة على المدى الطويل لنمو المدينة.
- 14. تطوير اسلوب بناء المشروعات العمرانية من اسلوب تنفيذ هذه المشروعات سواء كانت اسكان أو مرافق أو خدمات بشكل كامل لتلبي متطلبات المدينة المتوقعة بعد فترة طويلة من الزمن الي تتفيذ هذه المشروعات بأسلوب مرحلي يتناسب مع المتطلبات المتنامية للمدينة الجديدة.

و لتحقيق هذه الأهداف تم وضع المنهج العلمي و هيكل الرسالة على الوجه التالي:

الباب الأول : ويتضمن التعريف بمستويات و أساليب كل من التخطيط و الادارة و العلاقة بينهما.

الباب الثاني : ويتضمن استعراض الفكر النظري و التطبيقي لادارة عملية التتمية للمدن الجديدة.

الباب الثالث : ويتضمن استعراض التجربة المصرية في ادارة تتمية المدن الجديدة.

الباب الرابع: شرح عناصر و مكونات الاسلوب المقترح لادارة المدن الجديدة.

## الباب الأول:

تم التعريف بأنواع التخطيط سواء كانت تخطيط عمراني أو اقتصادي أو اجتماعي ثم التعريف بعمليات التخطيط و التي تشمل علي عملية اعداد التخطيط القومي و عملية اعداد التخطيط القطاعي و عملية اعداد التخطيط العمراني التقليدي و عملية اعداد المشروعات الانشائية. وكذلك تعرض الباب الأول الي مكونات الادارة بشكل عام مع تحديد مستويات الادارة بداية من ادارة التتمية الي ادارة المشاريع العمرانية الي ادارة عمليات

و أخيرا استعرض الباب الأول التغيرات التي طرأت على النظرية التقليدية في اعداد المخططات العمر انية.

البناء و التشييد و تحديد الأنشطة المختلفة لادارة التنمية العمر انية وأيضا نظام الادارة للتنمية

## البساب الثاني:

العمر انية على مستوياتها المختلفة.

تم استعراض الفكر النظري لمراحل عملية التخطيط التقليدية للمدن الجديدة مع التركيز علي الجوانب الادارية و التنظيمية لعناصر التنمية العمرانية.

كما استعرض الباب الثاني أيضا اسلوب اتخاذ القرار و كيفية التعامل مع المشاكل المختلفة في الواقع تحت ضغط الوقت و عدم كفاية المعلومات وعدم وضوح الأهداف و كذلك شرح عملية اتخاذ القرار و الاختيار الاستراتيجي و الذي يبدأ منPROBLEM INPUT لمرحلة تكوين المشاكل وهي تصميم المشكلة ثم المقارنة ثم الاختيار للوصول الي عدد من القرارات.

مع التركيز علي مجموعة من المشاكل ذات الأولوية في الحل و دراسة العلاقات التبادلية بينهما وذلك بهدف الوصول الي مجموعة من الحلول المقترحة التي يمكن اختيار احداها. ويتصمن الباب الثاني في نهايته التجربة البريطانية في ادارة تتمية المدن الجديدة بها وذلك بهدف الخروج ببعض الدروس المستفادة منها عند دراسة التجربة المصرية.

#### الباب الثالث:

فيتضمن في البداية استعراض تاريخ بناء المدن الجديدة في مصر و كذلك استعراض لاستراتيجية التنمية القومية في مصر ثم استعرض البحث العلاقات التبادلية الرأسية بين المستويات المختلفة للتخطيط من المستوي المركزي الي مستوي المحافظات فالمراكز فمستوي المدن و دور الوزارات القطاعية وبصفة خاصة دور وزارة التعمير و العلاقات الافقية بينهما في كل مستوي.

ثم استعرض البحث الهيكل التنظيمي و الاداري لهيئة المجتمعات العمرانية الجديدة بادارتها و اختصاصاتها المختلفة و كذلك الهيكل التنظيمي و الاداري لأجهزة تنمية المدن الجديدة و بصفة خاصة جهاز تنمية مدينة العاشر من رمضان باداراته و أقسامه المختلفة و اختصاصات كل منهما.

وأخيرا استعراض البحث الهيكلي التنظيمي و الاداري لهيئات التخطيط الاقليمي و التابع لوزارة التخطيط متضمنة كذلك أقسامه و اداراته المختلفة و اختصاصات كل منهما.

وقد تعرض البحث في الباب الثالث في نهايته الي تجربة التنمية العمرانية لمدينة العاشر من رمضان متضمنة الجوانب الاقتصادية و الاجتماعية و العمرانية و مرحليات التنفيذ للمرحلة الأولى للمدينة والتي يظهر منها:

- 1. تباعد مناطق التعمير.
- 2. زيادة معدلات التتمية الصناعية كثيرا عن معدلات الاستيطان البشري.
- 3. تنفيذ شبكات البنية الأساسية و الخدمات العامه لتخدم عدد معين من السكان لم يتم توطينهم كما هو متوقع.
- 4. ضعف عوامل الجذب البشري عنه في المدن القائمة بسبب القوانين و اللوائح التي لاتساعد علي زيادة عوامل الطرد من المدن القديمة مع زيادة عوامل الجذب في المدن الحديدة.
- اقتصار دور جهاز تنمية المدينة علي تنفيذ مشروعات التنمية العمرانية دون تنفيذ مشروعات التنمية الاقتصادية و الاجتماعية.

#### البساب الرابع:

ويشرح بالتفصيل عناصر و مكونات الاسلوب المقترح لتطوير ادارة تنمية المدن الجديدة فيشتمل في بدايته علي توضيح مستويات الادارة للتنمية العمرانية من مستوي السياسات الي المستوي التنفيذي كما يشتمل علي علاقة التنمية المحلية للمدينة الجديدة باسلوب التنمية علي المستويات الأعلى ( الاقليمية و القومية ) والتي يشتمل كل منهما على عمليات التخطيط ثم

التنقيذ ثم المتابعة ثم التقييم ثم التطوير (عملية مستمرة) علي كل مستوي متضمنا المكونات الاقتصادية و الاجتماعية و المكانية و الادارية.

وبذلك يصبح المكون الاداري عنصرا مكملا للمكونات الاقتصادية و الاجتماعية و العمرانية في التنمية المتكاملة للمدن الجديدة.

كما يقترح البحث تصميم عملية التتمية المتكاملة شاملا تصميم الجوانب المختلفة و المكون لعملية التنمية.

ويستطرد البحث في شرح و توصيف مهام التخصصات التخطيطية المختلفة على مدي عوامل التنمية العمر انية.

وبذلك أمكن وضع الهيكل التنظيمي و الاداري المقترح لجهاز ادارة تنمية المدن الجديدة و الذي يشتمل علي الادارات و الأقسام المختلفة مع شرح و توصيف اختصاصات كل منها بالاضافة الي وضع تصور للهيكل التنظيمي و الاداري لمركز البناء المحلي كأحد المكونات الأساسية لجهاز تنمية المدينة.

ويتطرق البحث بعد ذلك الي الشرح التطبيقي لمرحليات التنفيذ لبعض عناصر التنمية العمرانية مثل مرحلية تنفيذ شبكة الطرق و مرحلية تنفيذ تغذية المدينة بالمياه و مرحلية تنفيذ الصرف الصحى للمدينة و مرحلية تنفيذ التغذية بالطاقة الكهربائية و أخيرا مرحلية تنفيذ المبانى العامه.

كما يعرض البحث استكمالا لاسلوب تنفيذ المرحليات للمشروعات الي طبيعة التحولات التي تتعرض لها الطرق المحلية أثناء مراحل التنمية العمرانية بداية من كونها شرايين للحركة المرورية تستقطب اليها مع الوقت أنشطة تجارية و ادارية ماتلبث أن تؤثر علي كفاءة الطريق الأمر الذي يتطلب تعديل وظيفتة مرحليا ليتحول من حركة مرورية الي حركة للمشاه.

الأمر الذي يؤكد ضرورة وجود نظم و أهداف و قوانين تحكم عملية التنمية العمرانية كعملية مستمرة تحتاج الي ادارة قادرة علي التعامل مع المتغيرات و من هذه النظم استعمال شبكة الوحدات التخطيطية التي يمكن أن تستوعب كل منها عنصر عمراني سواء كان اسكان أو خدمات تعليمية أو رياضية أو غير ذلك بما يوفر المرونة في تلبية الاحتياجات المختلفة للتنمية علي مدي المراحل التنموية المختلفة و يساعد ذلك جهاز تنمية المدينة علي توفير المتطلبات المنتامية للمدينة الجديدة.

وهكذا تصبح الادارة المكون الرابع للتنمية المتكاملة لتصبح تنمية اقتصادية اجتماعية عمرانية و ادارية.